TATA CONSULTANCY SERVICES

Experience certainty. IT Services
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CDR1, Clarity

Version 1.0

User Manual, March, 2009

BSNL, Hyderabad, India

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Deccan Park, Hyderabad,

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About this Manual

Purpose

This manual has been written to help you understand and use the Clarity application. It presents the functional capabilities and operational details of Clarity, and contains the procedures that you should know for performing your business tasks using Clarity. Additionally, this manual provides information on the system requirements and installation of Clarity.

The scope of the document is limited to System Connect, Configuration Manager and Number Manager of the Clarity OSS Suite.

The System Administration and Database Maintenance tasks have not been covered in this manual. For more information about these functions, please refer to the Administrator's Guide for Clarity.

Intended Audience

This manual is intended for the personnel in the department of BSNL CDR1.

Prerequisites

Following are the prerequisites for performing the tasks presented in this manual:

Functional	Basic understanding of the processes involved in digitising, storing, analysing, tracking and dispatching ECGs received from different sites
Technical	Basic understanding of Graphical User Interfaces (GUIs) and Windows File System

Organisation of the Manual

Information in this manual has been organised as follows:

Chapter	Description
Chapter 1	Provides a brief introduction to Clarity. It also details the hardware and software requirements, and interfaces with other systems
Chapter 2	Takes you on a quick tour of Clarity. It gives a brief introduction about starting the application and the general working features
Chapter 3	Describes the Inventory Management System of Clarity
Chapters 4	Describes the Order Management System of Clarity
Chapter 5	Describes the Provisioning System in Clarity

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1 Introduction

This user manual provides an introduction to the Clarity application. Clarity is the telecommunication industry's Operational Support System (OSS) business process automation company – providing a pre-integrated product and database that streamline the eTOM elements of OSS into a single suite.

The main components of the Clarity system, used extensively for provisioning in this project are:

- Clarity System Connect: It enables the integration of Clarity applications with third party BSS and OSS
- Clarity Configuration Manager: It models the end-to-end enterprise network of a service provider. This network is used to provide services to customers. It intelligently manages the complex configuration of a modern telecommunications network. It also integrates with Service Manager Module in the Clarity product suite and allocates network inventory and capacity, apart from recording infrastructure used by services for capacity and fault management
- Clarity Number Manager Module: It manages the creation and allocation of numbers across services, supporting the concerned business groups in the planning and activation of number ranges across products, switches and geographic locations

This User Manual describes the tasks that can be performed using the following modules:

- Order Management
- Inventory
- Provisioning

Order Management (Application and Contacts)

These are used for the entry and management of information that is generic across the Clarity system. This includes access rights, settings, customers and accounts, employee and account manager contacts and work group definitions.

Inventory

Clarity inventory supports the logical and physical configuration of telecommunication networks, providing full integration of network elements and network element management systems.

The Clarity network and circuit diagrams are used to display network or circuit configuration data.

This module also supports advanced number management. The number module manages the creation and allocation of numbers across services.

Provisioning

The Provisioning module streamlines service provisioning of telecommunications products. It enables rapid and reliable convergent service provisioning for products such as leased line, data, fixed, mobile, 1800, broadband and IP-based services.

1.1 Purpose of Clarity

Main Objective	• Manage Network and Number Inventory • Automate service procedures, inventory management and reduce turnaround time for service requests • Allocate appropriate work force based on the activity to be performed for various tasks during service provisioning/ deprovisioning
Business Functions Automated	• Flow of a service request during 'Technical Order Management' life-cycle • Inventory • Assignment of appropriate work force for various tasks during service provisioning/ deprovisioning

1.2 Environment

This section describes the software and hardware environment required to run the application.

1.2.1 Software Environment

Operating System	Windows XP with Internet Explorer 6 browser, or Windows Vista with Mozilla browser
Other Software	JInitiator (Version:1.3.1.26)

1.2.2 Hardware Environment

Communication Infrastructure	LAN card
Other Hardware	1GB RAM

1.3 User Roles

This section describes the roles and responsibilities of the various users who support the application.

Application Admin	• Configure Inventory, which includes Numbers, Network Elements (Switches), Main Distribution Frames (MDF), Pillars, Distribution Points (DP) • Configure Work Groups • Associate Employees to appropriate Work Groups

Application Admin	• Configure Inventory, which includes Numbers, Network Elements (Switches), Main Distribution Frames (MDF), Pillars, Distribution Points (DP) • Configure Work Groups • Associate Employees to appropriate Work Groups
Working Level	• Provide inputs to the system wherever required • Update the respective task status to ‘Complete’
Supervisory Role	• View the status of the order

2 Getting Started

Clarity is mainly used for Order Management, Inventory Management and Activation. The following sections describe the basic functionalities of Clarity.

2.1 Logging In and Logging Out of Clarity

Access to Clarity is limited only to authorised users. To use it, you must first log into the application using your user ID and password. On logging in, Clarity allows you to start any of the modules to which you have access rights.

2.1.1 Logging In

Prerequisites to proceed: Jinitiator has to be installed to launch the Clarity application. If the system has admin rights, it downloads automatically.

To log on to Clarity:

1. Open Internet Explorer (6.0 and above) or Mozilla Firefox (1.5 and above).
2. Enter the required URL and press **Enter**. The Clarity Start Up Page appears.

   Note:

   i. The south production Clarity URL is http://10.196.208.166:7778/clarity.

   ii. The west production Clarity URL is http://10.193.208.87:7778/clarity.

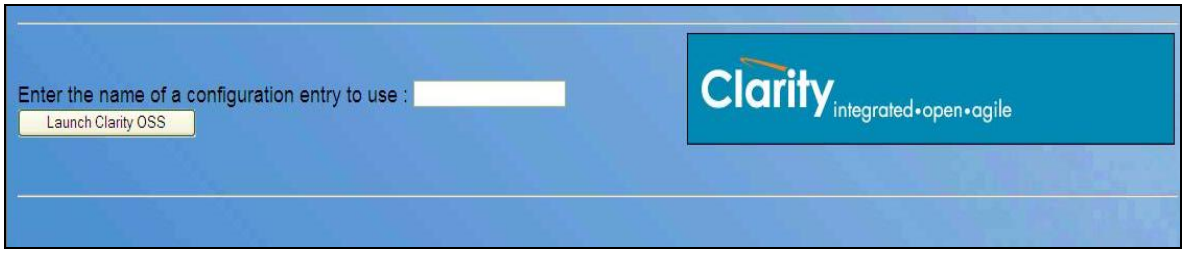

Figure 1: Clarity OSS C10 Start Up Page

3. Enter the configuration entry in the **Enter the name of a configuration entry to use** field.

   Note: The configuration entry can be for either of the tasks that can be performed using this screen. These tasks are:

   i. Logging in to Clarity OSS/ BSS Application: **Configuration Entry: c10fr_dev01**.

   ii. Oracle Application Server Forms Services Installation: This is required whenever you are logging in for the first time to Clarity. Before logging in, use this entry to install forms and services for the first run: **Configuration Entry: c10_frdev01**.

4. Click **Launch Clarity OSS**. A message appears, "*The webpage you are viewing is trying to close the window. Do you want to close this window*?"

5. Click **Yes**. The Clarity homepage starts initialising and the logon dialog box appears.

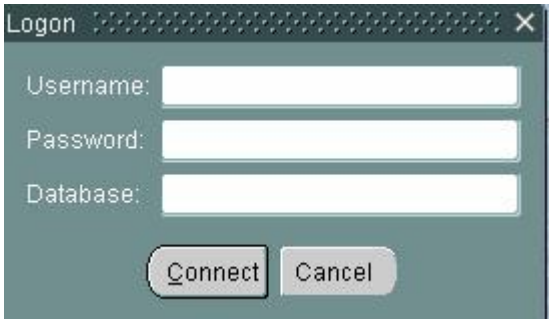

Figure 2: Clarity Logon dialog box

6. Enter the Username, Password and Database name in the logon box and click **Connect**. The Clarity home page appears.

7. Enter the:

   - Username. This is the User ID provided by the administrator
   - Password: This is provided by IDM
   - Database name: Name of the database for which you want to access Clarity OSS

   Note:

   i. The fields are not case-sensitive.
   ii. After three unsuccessful attempts, you will exit the application.

2.1.2 Logging Out

After completing the required tasks, you can exit the application.

To log out of Clarity:

1. Click **Application** on the Clarity main page. A dropdown list appears.
2. Select **Exit**. You are successfully logged out of the application.

2.2 Working with the Clarity Interface

This section describes how the different interfaces of Clarity can be used.

2.2.1 Using Menus and Toolbars

Menus and toolbars can be used to access Clarity functionalities. While the menu displays a list of commands, the toolbar contains buttons with images, menus, or a combination of both.

Every screen in Clarity contains the common toolbar. The functions of this toolbar are the same throughout the application.

The toolbar buttons are listed in the figure given below, in the order they appear on screen:

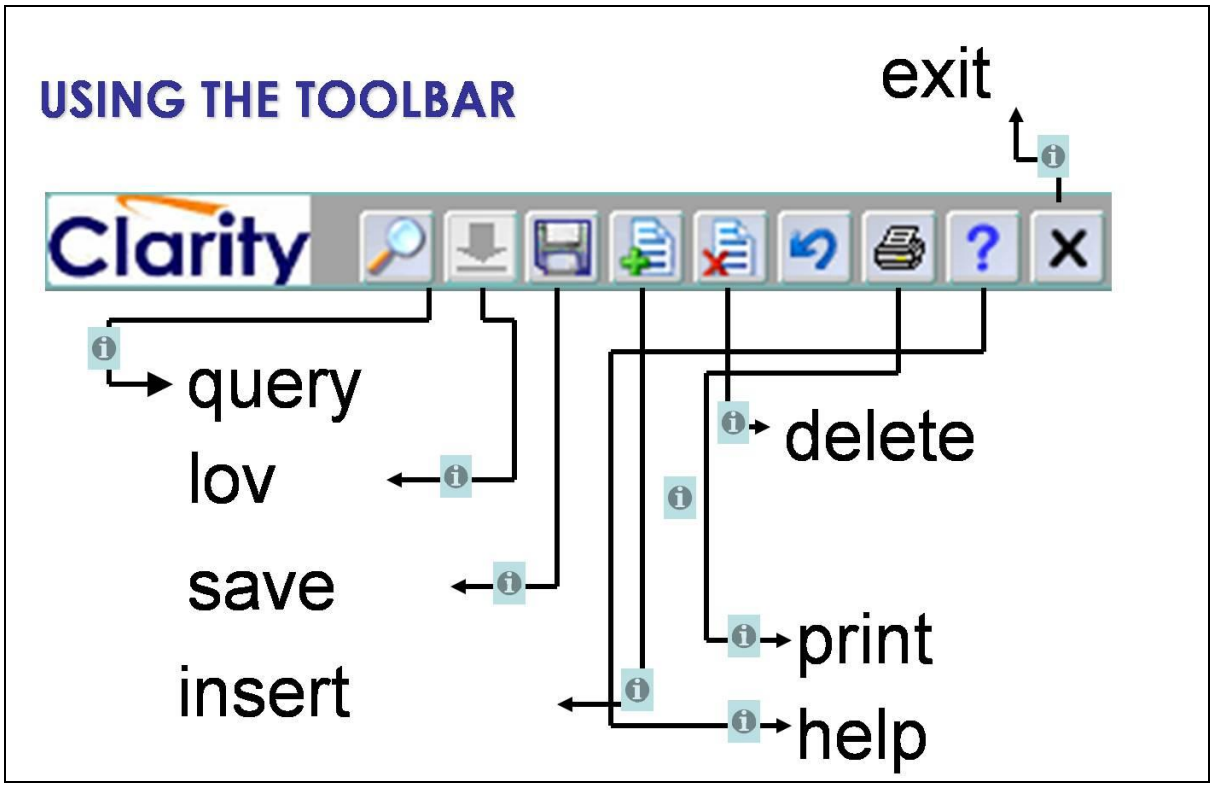

Figure 3: Clarity Toolbar

Field References

Each icon that appears in the common toolbar is described below:

Table 1: Toolbar Icons

Field Name	Field Description
	The **Query** icon is used to search for data in the selected screen

Field Name	Field Description
	The **LOV** icon provides access to a preset list of values that can be used for entry in a selected field. In case the LOV is not available for a field, the icon is grayed out
	The **Save** icon enables you to save any changes to data or new entries in the selected screen
	The **Rollback** icon is used to clear data associated with the last action
	The **Insert** icon allows you to create a new record
	The **Delete** icon is used to delete a selected entry within a screen
	The **Print** icon opens a printer dialog box, which can be used to print data to a selected destination
	The **Help** icon opens the Clarity online help
	The **Exit** icon closes the screen currently being viewed. It is also used to cancel Query mode

2.2.2 Using Shortcut Keys

This section describes the functions of the shortcut keys, including information about the keyboard shortcuts and menu options.

Table 2: Using Shortcut Keys

Function	Screen Icon	Keyboard Shortcut	Menu Option
Cancel	ESC	-	-
Copy	CTRL+C#	-	Edit ➔ Copy
Clear Field/Item	CTRL+U	-	Edit ➔ Clear
Comment Details	CTRL+E	-	-
Delete	DELETE		Edit ➔ Delete
Exit / **Undo Query Mode**	CTRL+Q		Application ➔ Exit
Help	F1		Help

Function	Screen Icon	Keyboard Shortcut	Menu Option
Insert	F6		Edit ➔ Insert
List of Values (LOV)	F9		Edit ➔ LOV
Paste	CTRL+V	-	Edit ➔ Paste
Print	CTRL+P		-
Enter Query	F7		Edit ➔ Query ➔ Enter
Execute Query	F8		Edit ➔ Query ➔ Execute
Rollback	SHIFT+F4		Edit ➔ Rollback
Save[##]	F10		-

[##] Saving of data is permitted only when sufficient information has been entered.

2.3 Clarity Screen Elements

Screen elements are the various elements displayed on every screen of Clarity. Common screen elements of the Clarity system graphical user interface include:

- Clarity Toolbar
  Note: The toolbar has been discussed in the earlier section.
- Field Information

Every screen contains a number of fields that are used for creating, defining or editing data. These fields display information related to that screen. Fields are categorised on the basis of:

- Colour Attributes
- Hint Text Display

2.3.1 Colour Attributes

Colour is used in the Clarity screens to indicate specific field attributes. These attributes are listed in the table below:

Table 3: Colour Attributes

Colour	Attribute
	All fields in blue are mandatory and information must be entered in them while creating a new record
	Fields in grey are non-editable and cannot be modified

Colour	Attribute
	The fields in white are optional ones
	A field with a red background contains primary, key information

2.3.2 Hint Text Display

The Clarity system includes hint text in the status bar located in the loew half of every screen. This text provides a context sensitive description of fields within the currently selected screen. This means that when you click in any field, this text prompts you to add information specific to that field.

Note: The hint text also indicates if the current field requires input using a List of Values (LOV).

An example of hint text is:

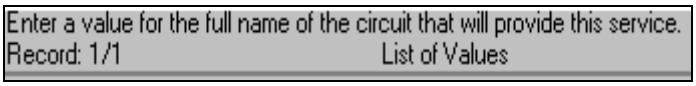

Figure 4: Hint Text Display

To ensure that hint text is visible, always maximise the application screen using the **Maximise** option in the upper half of the screen. Or, double click the application's blue title bar.

2.4 Working with Records

This section describes how to work with records and search for values. The result of any query performed is a set of records which satisfy the condition given for that query. For example, Searching for service orders,

This section describes:

- Navigating through records
- Using the LOV search criteria
- Inserting a new record
- Querying a record
- Using the List of Values
- Modifying records
- Deleting records
- Saving data
- Refreshing a record set

- Identifying the Number of Records in a Record Set
- Navigating to the Next Field in the Same Record
- Navigating to the Previous Field in the Same Record
- Expanding a Comments Field

2.4.1 Navigating Through Records

This section deals with finding specific records after a search is performed. **Edit ➔ Records Menu** contains options that help locate records more easily. These are:

- First Record
- Previous Record
- Next Record
- Last Record

2.4.2 Using the List of Values Search Criteria

Some fields require an entry from a List of Values (LOV) retrieved from the database. When the LOV option is available, the button is enabled. Clicking the **LOV** button or pressing **F9** retrieves a list of values.

To select a value or record:

- Use auto-reduction
- Search using a wildcard character

Note: Auto-reduction is only available when the **LOV** displays an initial list in the list pane. If the list pane is empty, you can only use the search method.

Search using Auto-Reduction

To use auto-reduction,enter the first letters of the value you are searching for. As you enter letters the list of values displayed reduces, as only values in the first column that match those typed appear.

To search using auto-reduction:

1. Click **LOV**, to enter data using the LOV option.
2. Enter the initial letters of the value you want to display.

   Note: Press **Backspace** to expand the reduced list of choices.
3. Select the required value.
4. Click **OK**. The selected value appears in the field.

Search using Wildcard Characters

You can enter search criteria for fields with wildcard characters to narrow or broaden the search results. The following table describes how to use the wildcard characters:

Table 4: Wild Character Search Criteria

Character	Description
%	The **Percent Wildcard Character** specifies that any character can appear in multiple positions represented by the wildcard. Instances where the % symbol can be used: • Enter **%** to retrieve all records • Enter **HYD%** to retrieve all records that begin with the letters HYD, such as HYD0001 or HYD0002 • Enter **%0001** to retrieve all records that end with 0001, such as HYD0001, or CHN0001 • Enter **%HYD%** to retrieve all records containing the letters HYD
_	The **underscore wildcard character** specifies a single position in which any character can occur. For example, if you enter **HYD000**_, the Clarity system retrieves all records that begin with the characters HYD000 and end with a single character, such as HYD0001 and HYD0002.

To search using wildcard characters:

1. Enter the search criteria in the **Find** field of the LOV dialog box, using wildcards.
2. Click **Find**. The search results appear.
3. Select the required value.
4. Click **OK**. The selected value appears in the field.

2.4.3 Inserting a New Record

To insert a new record:

Click **Insert** with the module in insert mode. A blank record appears on the screen.

Note: New records cannot be inserted when the screen is in Query mode.

2.4.4 Querying Records

All queries across all Clarity modules use the same following instruction.

To query a record:

1. Click **Query.**

   Or

   Press **F7**. The screen enters query mode.

2. Enter the search criteria in the selected field.
3. Click **Query** again.

   Or

   Press **F8**. The record matching the search criteria appears.

   Note:

   i. Use the scrollbar to search for the required records.

   ii. Double click **Query** without entering any search criteria to retrieve all records. However, this can impact the system performance if there are a large number of records to retrieve.

2.4.5 Using the List of Values

For details, see Using Menus and Toolbars.

2.4.6 Modifying Records

To modify an existing record:

1. Query the record you want to modify.
2. Highlight the field that has to be modified.
3. Enter the new value and click **Save**. The changes are saved to the database.
   Note: The **LOV** button is enabled for fields that require selection from the list of values.

2.4.7 Deleting Records

To delete an existing record:

4. Query the record you want to delete.
5. Click **Delete**. A message appears, asking you to confirm the deletion.
6. Click **Yes**. The record is deleted.
   Note: The deletion is confirmed by the record set count decreasing by one.

2.4.8 Saving Data

Saving data is permitted only when sufficient information has been entered.

Data is saved using:

- The **Save** button on the toolbar

  Note: This function can be used as frequently as necessary.

- The **Save** option in the message that appears on selecting relevant options, while working with records

  Note:

  i. Click this button instead of the **Save** button on the toolbar.

  ii. It you click **Exit** before saving, a message appears prompting you to save the information.

2.4.9 Refreshing a Record Set

The view of screens with a **Timer** or **Timing** field can be refreshed. The default Timing or Timer value is one minute.

To refresh the record set:

Click **Set.** The record set is updated, based on the filters in force.

2.4.10 Identifying the Number of Records in a Record Set

To identify the total number of records in a record set:

1. Maximise the screen.

   Note: Use the **Maximise** option on the upper right half of the screen.

2. Select **Records ➔ Last Record** from the File menu. The record count appears on the status bar on the lower left corner of the screen. For example, Record 26/26.

2.4.11 Navigating to the Next Field in the Same Record

To navigate to the next field in the same record:

Press **Tab**. The cursor moves to the next field.

2.4.12 Navigating to the Previous Field in the Same Record

To navigate to the previous field in the same record:

Press **Shift+Tab**. The cursor is placed in the previous field in the record.

2.4.13 Expanding a Comments Field

A field can be expanded for better visibility, to view more than one line of text when the cursor is placed in a comment description field.

To expand a comments field:

Press **Ctrl+E**. A message appears, displaying the entire text.

3 Inventory Management

The Inventory Management System manages the physical and logical configuration of the telecommunications network. All the network related components like Network Elements (NEs) and Frames are a part of physical configuration. Logical configuration includes numbers and areas.

Clarity Inventory Management is broadly categorised into three types:

- Network Management
- Number Management
- Accessory Management

Network Management deals with infrastructure like Network Elements (NEs), Main Distribution Frames (MDFs), Pillars and Distribution Points (DPs). It also includes the area hierarchy.

Number Management deals with the life cycle of numbers attached with area codes, Subscriber Trunk Dialling (STD) codes, service types, number types and so on.

Accessory Management deals with the maintenance of an accessory count (available and allocated) at the Secondary Switching Area (SSA) level.

The screens described in this section are:

- Areas
- Locations
- Network Elements
- Server Equipment
- Management Systems
- Frames
- Manage Service Types
- Number Creation
- Number Manager
- Circuit Design
- Generic Query

3.1 Areas

The Areas screen is used to provide logical groupings of the geography/ exchange based areas and locations.

The geography/ exchange based hierarchy is:

- Circle
- SSA
- Exchange
- Switch (Network Element)

The relationship between these areas is hierarchical. For example, one SSA can have many associated exchanges, and one exchange can have many associated switches. Also, the Locations are associated with exchange area records.

Tasks that can be performed using this screen are:

- Creating an area record
- Querying an area record
- Deleting an area record

To navigate to the Areas screen:

1. Click **Inventory** on the Clarity home page. A dropdown list appears.
2. Select **Areas**. The Areas screen appears.

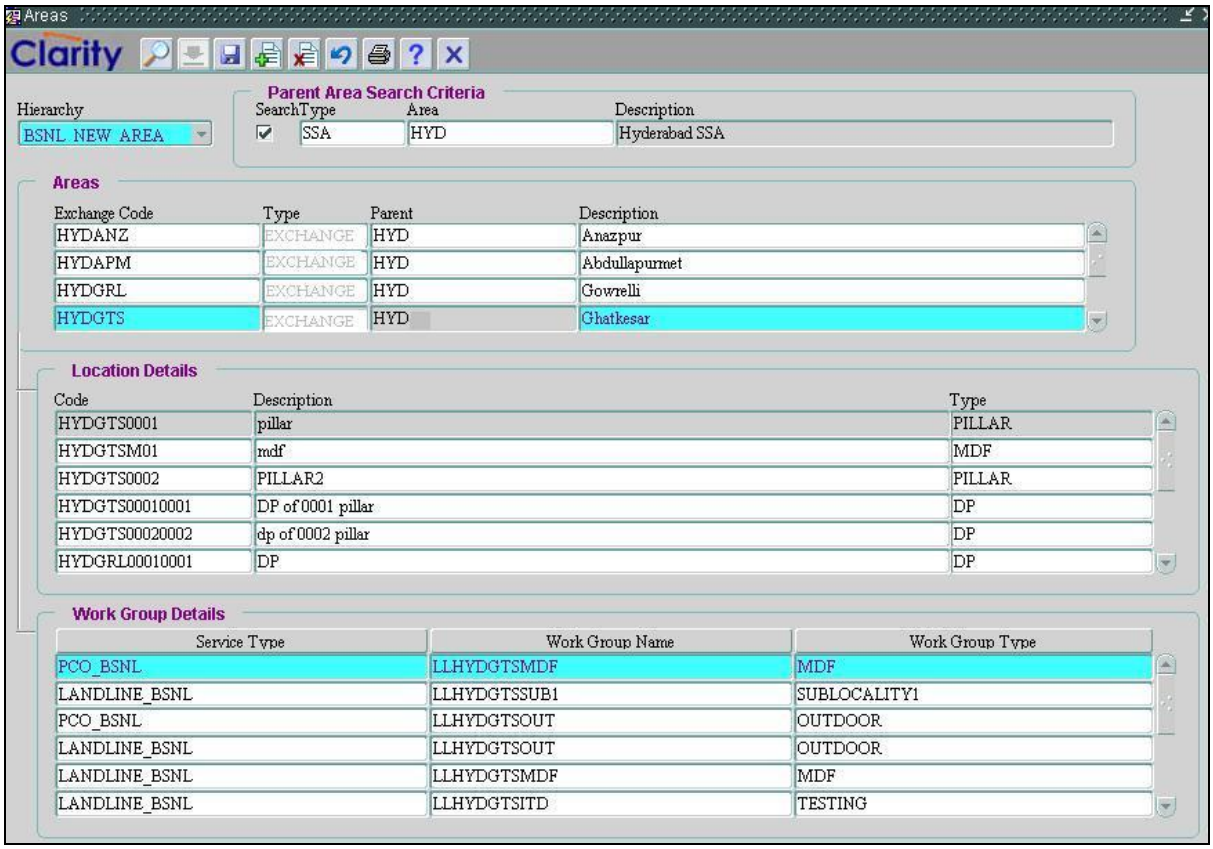

Figure 5: Areas

Field References

The field names and description of all the fields that appear in the Areas screen are given below:

Table 5: Field References for Areas

Field Name	Field Description
Hierarchy	This is a mandatory field that contains a dropdown list. This list is used to select the type of hierarchy being created or modified
Parent Area Search Criteria	
Search	Select this checkbox when creating or querying parent areas to display the Type and Area

Field Name	Field Description
Type	This field is auto-populated if an area is selected in the Parent Area Search Criteria Area field. It displays the area type of the parent area. Use LOV to select a value
Area	This field is auto-populated if an area is selected in the Parent Area Search Criteria Area field. It displays the area in which the area is located
Description	This field is automatically populated if an area is selected in the Parent Area Search Criteria Area field. It displays a description of the area
Areas	
Code	This is a mandatory field for the code that represents the area
Type	This is a field for the valid area type. Use LOV to select a value. Area types are set up in the Area Types reference screen
Parent	This field is automatically populated with the parent information selected in the SSA parent name. It is empty if the area is the top-most level in the hierarchy
Description	This is a mandatory alpha-numeric field to further describe the area
Location Details[#]	
Code	A unique code that identifies the physical location of a component
Description	The description of the location
Type	The type of the location
Work Group Details	
Service Type	This is a mandatory field for the type of service available in the selected area. Use LOV to select a value. Service types are set up in the Service Definition reference screen
Work Group Name	This is a mandatory field for the name of the work group assigned to carry out work for the select service type. Use LOV to select a value. Work groups are set up in the Work Groups screen
Work Group Type	This is a mandatory field for the type of work carried out by the work group. Use LOV to select a value. Work group types are set up in the Work Group Types reference screen

All fields in the section marked with [#] are auto-populated and non-editable.

3.1.1 Creating an Area Record

Prerequisites to proceed: Area Hierarchy must be present in the database. If not, it can be populated by navigating to: **Inventory ➔ Reference Data ➔ Area Types**

The following procedures describe how to create a hierarchy of parent and child area records in the Areas screen:

- Creating SSA Records
- Creating Exchange Records
- Creating Switch Area Records

Creating SSA Records

SSAs are parent records and can have multiple child exchange records assigned to them.

To create a parent area record:

1. Navigate to the **Areas** screen.
2. Select a hierarchy type from the **Hierarchy** dropdown list. Details of the available circles appear in the Areas section.
3. Select a circle and double click. SSAs available for that circle appear.
4. Place the cursor in any field in the Areas section, except Type.
5. Click **Insert** to create a new SSA record. A new, highlighted row appears in the Areas section.
6. Enter the new SSA code in the **Code** field.

   Note:

   i. The length of the SSA code must be three characters. For example, Hyderabad's SSA code is HYD**.**

   ii. If the SSA code is not unique, an error message appears when you attempt to save the record.
7. Further describe the area in the **Description** field.
8. Click **Save**. A message appears, "*Your changes have been successfully saved*".
9. Click **OK.** The changes are saved.

Creating Exchange Records

Exchange records are always related to a single SSA record. The parent SSA record must be selected before creating the child exchange record. Exchange records can have multiple child switch area records.

To create an Exchange record:

1. Navigate to the **Areas** screen.
2. Select a hierarchy type from the **Hierarchy** dropdown list.
3. Select **Search** in the Parent Area Search Criteria section. The **Type** and **Area** fields get activated.
4. Click in the **Type** field in the same section. The **LOV** icon is enabled.
5. Click **LOV**. A list of the Valid Area Types appears.
6. Select an SSA type and click **OK**. The selected SSA type is updated in the Type field.
7. Click in the **Area** field. The LOV icon is enabled.
8. Click **LOV**. A list of the Valid Area Types appears.
9. Select the Valid Area Type and click **OK.** The selected Area Type is updated in the Area field; the Description field and Areas section are auto-populated.
10. Place the cursor in any field in the **Areas** section, except Type.

11. Click **Insert** to create a new exchange record if no exchange exists. A new, highlighted row appears in the Areas section.
12. Enter the new exchange code in the **Code** field.

    Note:

    i. The length of the exchange code field must be six characters. The first three characters signify the SSA code and the next three characters signify the exchange code. For example, for Hyderabad's Ghatkesar Exchange is HYDGTS.

    ii. If the exchange code is not unique, an error message appears when you attempt to save the record.
13. Enter the full name of the exchange in the **Description** field. For example, if HYDGTS is the exchange code then the description could be Ghatkesar.
14. Click **Save**. message appears, "*Your changes have been successfully saved"*.
15. Click **OK.** The changes are saved.

    Note: Instead of steps 3-15, you can repeat steps 3-9 of Creating SSA Records, with the relevant data.

Creating Switch Area Records

Switch area records are always related to a single exchange record. You have to select the parent exchange record before creating the child switch area record.

To create a Switch Area record:

1. Navigate to the **Areas** screen.
2. Select the hierarchy type from the **Hierarchy** dropdown list.
3. Select **Search** in the **Parent Area Search Criteria** section. The Type and Area fields get activated.
4. Click in the **Type** field in the same section. The LOV icon is enabled.
5. Click **LOV**. A list of the Valid Area Types appears.
6. Select an exchange type and click **OK**. The selected exchange type is updated in the Type field.
7. Click in the Area field. The LOV icon is enabled.
8. Click **LOV**. A list of the Valid Area Types appears.
9. Select the Valid Area Type and click **OK.** The selected Area Type is updated in the Area field, the Description field and Areas section are auto-populated.
10. Place the cursor in any field in the **Areas** section, except Type.
11. Click **Insert** to create a new switch record. A new, highlighted row appears in the Areas section.
12. Enter the new switch code in the **Code** field.

    Note:

    i. The length of the switch area record must be nine characters. The first three characters signify the SSA, the next three signify the exchange, the seventh signifies the switch type and the last two signify the index of the switch. For example, the switch code for the only CDOT switch at Ghatkesar exchange that belongs to Hyderabad SSA would be HYDGTSC01.

ii. If the exchange code is not unique, an error message appears when you attempt to save the record.

13. Enter the description in the **Description** field.
14. Click **Save**. A message appears, "*Your changes have been successfully saved"*.
15. Click **OK.** The changes are saved to the database.

Note: Instead of steps 3-15, you can repeat steps 3-9 of Creating SSA Records, with the relevant data.

3.1.2 Querying an Area Record

To query an area record:

1. Navigate to the **Areas** screen.
2. Select the hierarchy type from the **Hierarchy** dropdown list.
3. Place the cursor in any field in the **Areas** section, except Type. The fields in that section are auto-populated.
4. Double click a record in the **Code** field to view the next level in the hierarchy for that record.

   Note: Repeat Step 4 to view the next hierarchical level for the record.
5. Click **Query** once you reach the required Type. A highlighted row appears in the Areas section.

   Note: Check the status bar to verify if the screen is in query mode.
6. Enter your search criteria in the **Code** field in the **Areas** section.

   Note: Use the **%** character as a wildcard. For example, entering HY% displays all records that start with HY or select a value from any available LOVs.

   Hint: To display all records leave the search area blank.
7. Click **Query** again. Matching records appear.

3.1.3 Deleting an Area Record

Prerequisites to proceed: Area records can only be deleted if they do not have linked locations, defined work group details and child records.

To delete an area record:

1. Navigate to the **Areas** screen.
2. Query the area record.

   Note: For details, see Querying an Area Record.
3. Select the record you want to delete.
4. Click **Delete**. The selected record is deleted.
5. Click **Save**. The changes are saved to the database.

3.2 Locations

All active and passive network components like NEs and MDFs belong to their respective geographic locations. Even if an exchange is geographically located at a single location, each component in that exchange must be defined at different logical locations.

Tasks that are performed using the Locations screen include:

- Creating a location record
- Querying location details
- Modifying location details
- Deleting location records

  Note: The Child Locations tab is not used.

To navigate to the Locations screen:

1. Click **Inventory** on the Clarity home page. A dropdown list appears.
2. Select **Locations/ Sites.** The Locations screen appears, with the Locations tab highlighted as the default one.

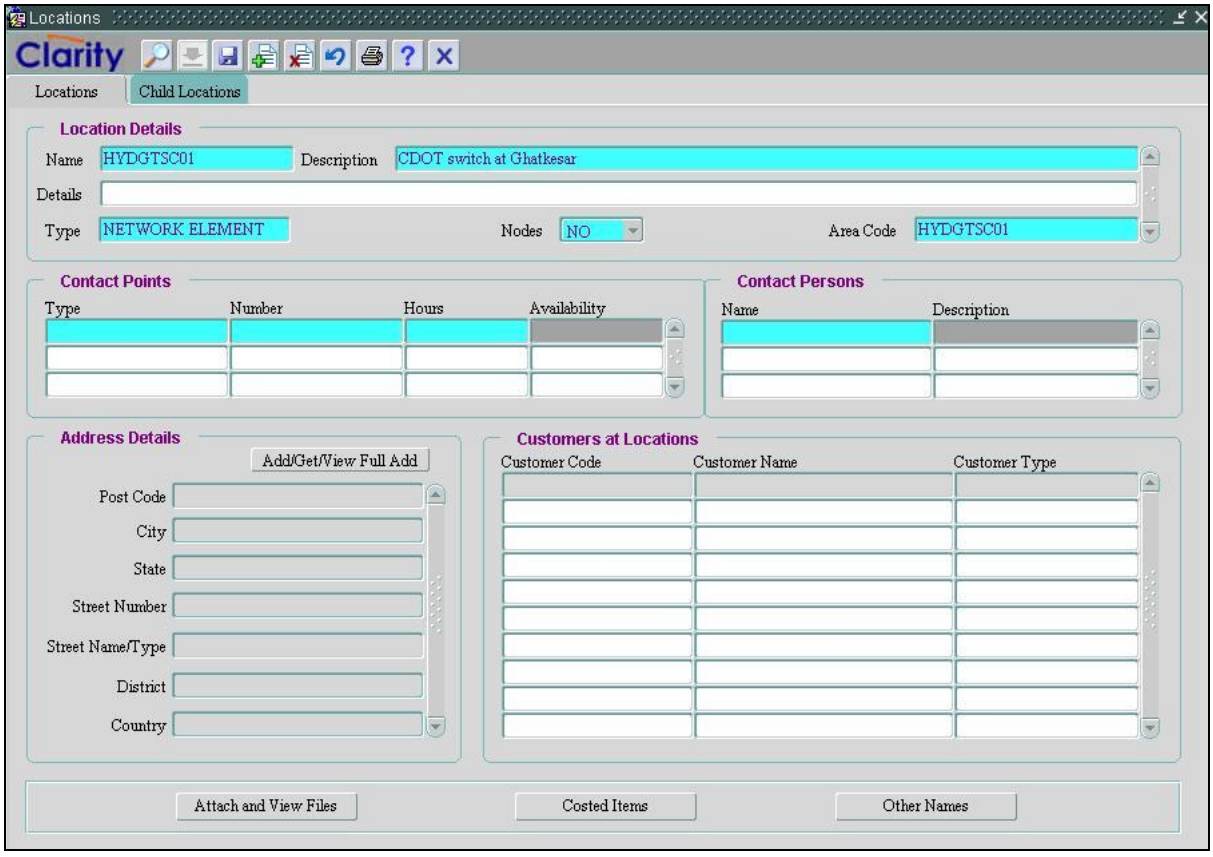

Figure 6: Locations

Field References

The field names and description of the fields that appear in the Locations tab are given below:

Table 6: Field References for Locations

<table>
<tr><th>Field Name</th><th colspan="3">Field Description</th></tr>
<tr><td colspan="4">Location Details</td></tr>
<tr><td rowspan="4">Name</td><td colspan="3">This is a mandatory field for the name that identifies this location. The naming conventions that are to be followed for different component locations while entering values in the Name field are:</td></tr>
<tr><td>Naming Convention</td><td>Description</td><td>Example</td></tr>
<tr><td>Network Element</td><td>The length of the location name has to be nine characters. The first three signify the SSA, the next three signify the exchange, the seventh signifies the switch type and the last two signify the index of the switch</td><td>The location name for the only CDOT switch at Ghatkesar exchange that belongs to Hyderabad SSA would be HYDGTSC01

Note: The area code must be same as the location name. The switch area code must have exactly one NE.</td></tr>
<tr><td>MDF</td><td>The length of the location name has to be nine characters. The first three characters signify the SSA, the next three characters signify the exchange, the seventh character must be ‘M' and the last two characters signify the index of the MDF</td><td>The location name for the only MDF at Ghatkesar exchange that belongs to Hyderabad SSA would be HYDGTSM01

Note: The area code must be the exchange code. For example, HYDGTS</td></tr>
<tr><td></td><td>Pillar</td><td>The length of the location name has to be 10 characters where the first three characters signify the SSA, the next three characters signify the exchange, and the last four characters signify the index of the pillar</td><td>The location name for the pillar with index ‘201A’ at Ghatkesar exchange that belongs to Hyderabad SSA would be HYDGTS201A

Note: The area code must be the exchange code. For example, HYDGTS</td></tr>
<tr><td></td><td>DP</td><td>The length of the location name has to be 15 characters. The first three characters signify the SSA, the next three characters signify the exchange, the next four characters signify the index of the pillar and the last five characters signify the index of the DP</td><td>The location name for the DP with index ‘030A1’ that belongs to the pillar with index ‘201A’ at Ghatkesar exchange of Hyderabad SSA would be HYDGTS201A030A1

Note: The area code must be the exchange code. For example, HYDGTS</td></tr>
</table>

Field Name	Field Description
Description	This is a mandatory alpha-numeric field that contains a full description of the site. It can contain upto 40 characters
Details	This field contains further details about the location
Type	This is a mandatory field that signifies the type of the location. For example NE, MDF, Pillar and DP. Use LOV to select an option. Data for this field is set up in the Location/Site Types reference screen
Nodes	This field is not used
Area Code	This is a mandatory field containing the area code associated with the location. Use LOV to select an area code

Note: Contact Points, Contact Persons, Address Details and Customers at Location are sections of the Location tab that are not used. Also, **Attach and View Files**, **Costed Items** and **Other Names** are buttons that are not used.

3.2.1 Creating a Location Record

This section is used to create a new Location or Site record.

To create a Location record:

1. Navigate to the **Locations** screen.
2. Enter details in the mandatory fields in the **Locations** tab.
3. Click **Save**. The changes are saved to the database.

3.2.2 Querying Location Details

This section is used to query the location records in the **Locations** screen:

To query a location:

1. Navigate to the **Locations** screen.
2. Click **Query**. The screen enters query mode.
3. Place the cursor in the field where you want to enter the search criteria.
4. Enter your search criteria and click **Query**. Matching records appear.

   Hint: Click **Exit** to cancel query mode.

3.2.3 Modifying Location Details

This section explains how to modify location details.

Note: The value in the **Location/Site** code cannot be modified after it has been used in the application.

To modify a location:

1. Navigate to the **Locations** screen.
2. Query the record that has to be modified.

Note: For details, see Querying Location Details.

3. Highlight the field in the Locations tab that you want to modify.
4. Enter the new value.
5. Click **Save**. Your changes are saved to the database.

3.2.4 Deleting Location Records

To delete a location record:

1. Navigate to the **Locations** screen.
2. Query and select the Location or Site record that has to be deleted.

   Note: For details, see Querying a Record.
3. Click **Delete**. The record is deleted from the screen.
4. Click **Save**. The record is deleted from the database.

   Note: A location or site record associated with any other screen or entity in the Clarity System cannot be deleted.

3.3 Network Elements

The screen contains information about the Network Elements (NE). Network Elements consist of cards, ports and there is a service type attached to each of them. The NE screen displays the circuits against each port.

Tasks that can be performed using this screen are:

- Creating network elements
- Applying port templates
- Copying network element records
- Copying card records
- Querying network elements
- Modifying network element records
- Deleting network element records

To navigate to the Network elements screen:

1. Click **Inventory** on the Clarity home page. A dropdown list appears.
2. Select **Components ➔ Network Elements**. The Network Elements screen appears.

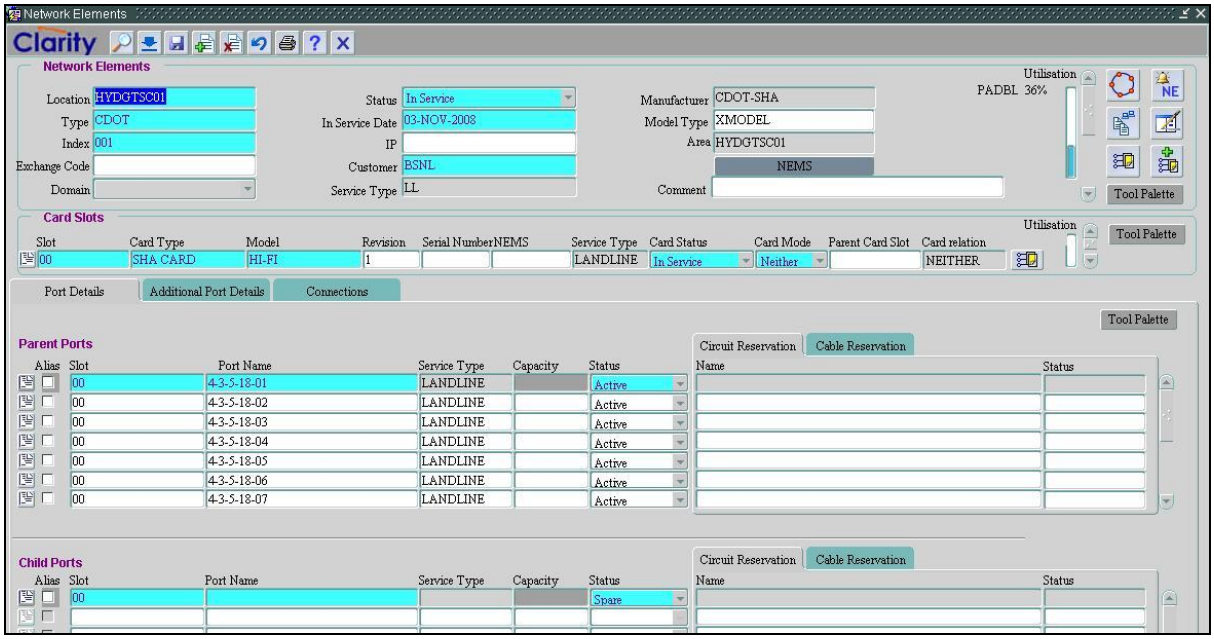

Figure 7: Network Elements

Field References

The field names and description for all the fields that appear in the Network Elements section are given below:

Note: The **Child Ports** section is not used.

Table 7: Field References for Network Elements

Field Name	Field Description
Network Elements	
Location	This is a mandatory field. Use LOV to select the location of the network element
Type	This is a mandatory field. Use LOV to select the Valid abbreviation for the Network element type
Index	This is a non-editable, auto-populated field with a sequence number of the Network element **Note:** As there should be only one NE defined per area code, the index is always '001'.
Exchange Code#	This is an editable, alpha-numeric field to specify the exchange code for the network element
Domain	This is a dropdown list used to select the domain of the network element. For example, Data, Switching and Transmission. The default value is 'Switching'
Status	This is a mandatory field. Select the current status of the network element from the dropdown list. For example, In Service, Spare and Planned. The default value is 'In Service'

Field Name	Field Description
InService Date	This is a mandatory, auto-populated date field to specify the network element creation date
IP#	This is an alpha-numeric field to specify the Internet Protocol (IP) address of the equipment. This information is necessary for communication
Customer	This is a mandatory field. Use LOV to select the Abbreviation for the customer. The default value is 'BSNL'
Service Type	Double click this field to view to update the list of values
Manufacturer	This is a mandatory field. Use LOV to select the Abbreviation for the Manufacturer **Note:** This is a conditional dropdown list showing only those manufacturer values which are associated against the Type.
Model Type	This is an editable field. Use LOV to select the manufacturer's model type. This field is linked to the equipment Type and Manufacturer fields
Area	This is an auto-populated field to specify area of the network element
Comment	This is an alpha-numeric field for comments **Note:** Click the Editor button to display the Editor screen.
NEMS	Click the **Network Element Management System** (NEMS) button to display the Network Element Alarm and SOP Node Identifiers screen. Use this screen to define multiple NEMS for a network element
Utilisation	Ultilisation reflects the total number of allocated active ports on all cards, displayed as a percentage. The bar graph is displayed in different colours, depending on the usage • Green: 0% - 49% • Orange: 50% - 79% • Red: 80% - 100% The statuses used in the Utilisation calculations appear next to the Utilisation field as an abbreviation. For example, PADBL stands for Planned, Active, InActive, Bad Port and Locked
Display Rings#	Click  to display the **Ring Definitions** screen
Display Alarms#	Click  to display the **NE Affecting Alarms** screen
Copy Network Element	Click  to display the **Copy Network Element** screen. Use this screen to create a copy of the network element record. This includes all card and port information. It does not include location and status
View/Modify Network Element or Dimension details#	Click  to display the **Assets And Dimensions** screen Use this screen to view and modify network element asset or dimension details

Field Name	Field Description	
Display Port Breakdown Templates	Click  to display the **Port Templates** screen	
Create Ports	Click  to display the **Add Ports from Template** screen	
Tool Palette	This button is activated only when information is entered in the Network Elements section. Clicking this button gives a dropdown menu	
	Alternate Names	Click this button to open the the **Alternate Network Element Names** screen. Use this screen to assign different names to the network element
	Attach and View Files#	-
	Bulk Update Service Types	Click this button to open the **Bulk Update Service Types** screen. Use this screen to update bulk update ports with service types
	Costed Items#	-
	Create NE From Template	Click this button to open the **Create Network Element from Template** screen.Use this screen to create an instance of a network element based on user defined information in the template
	Create NE Template	Click this button to open the **Create Network Element Template** screen. Use this screen to create a network element template based on the network element currently displayed
	Equipment Features#	-
	Element Utilisation	Click this button to open the **Element Utilisation** screen. Use this screen to select which statuses are included in the utilisation calculation in the **Utilisation** fields in the Network Elements section

Field Name	Field Description	
		and the Card Slots section of this screen. The selected statuses appear next to the Utilisation fields as an abbreviation. For example, PADBL stands for Planned, Active, InActive, Bad Port and Locked
	Floor Location Details#	-
	Internal Connections#	-
	Lock/Unlock Ports	Click this button to open the **Lock/Unlock** Ports screen. Use this screen to lock (make unavailable) or unlock (make available) a range of ports associated with the selected card slot
	Manage Service Type Details	Click this button to open the **Network Element Service Type** Screen. Use this screen to view and update list of service types
	Move Network Element	Click this button to open the **Move Network Element** Screen
	Move Services	Click this button to open the **Change Ports** screen. Use this screen to select a source card slot and destination card slot. Click the **Transfer** button to move the selected starting port and ending ports to the new ports.The existing phone numbers will be disassociated from the old ports and moved to the new ports
	Network Element Aliases	Click this button to open the **Network Element Aliases** Screen. Use this screen to enter an alias name for the NE screen

Field Name	Field Description	
	Network Element Parameters	Click this button to open the **Network Element Parameters** screen. Use this screen to add network element parameters like 'CENTREX ENABLED', 'MSC BASED' and 'ACTIVATION TYPE' **Note:** These parameters are defined in **Network Element Parameter validation** screen.
	Pre-Provision Ports#	-
	System configuration#	-
	Utilisation Thresholds	Click this button to open the **NE Utilisation Thresholds** screen. Use this screen to view default thresholds defined for this screen
	View Network Element#	-
Card Slots		
Add Card Attributes#	Click  to open the **Card Parameters** screen	

Field Name	Field Description	
Slot	It is a mandatory field to specify the physical slot in the equipment chassis the card occupies	
Card Type	Use LOV to select the card type. For example, HSU, CPU, PS or Aggregate **Note:** This is a conditional dropdown list showing only those card types values that attached to manufacturer of NE.	
Model	It is an auto-populated field to specify the model number of the card	
Revision	It is a non-editable, alpha-numeric field for the model revision number	
Serial Number#	-	
NEMS#	-	
Service Type	Double click this field to view and update list of values **Note:** These service types are a superset of the card service types.	
Card Status	It is a dropdown list to select the current status of the card, For example, 'In Service', 'Spare' and 'Planned'. The default value is 'In Service'	
Card Mode	It is a dropdown list to select the working mode of the card slot. Valid values are Neither**,** Working or Protect. The default value is 'Working'	
Parent card slot#	-	
Card relation#	-	
Display Cards Hierarchy	Click  to open the Cards Hierarchy screen	
Utilisation	This section shows the number of allocated active ports for the selected card as a percentage. The bar graph is displayed in different colours depending on the utilisation: • **Green**: 0% - 49% • **Orange**: 50% - 79% • **Red**: 80% - 100% The statuses used in the Utilisation calculations appear next to the Utilisation field as an abbreviation. For example, PADBL stands for Planned, Active, InActive, Bad Port and Locked	
Tool Palette	This button is activated only when information is entered in the Card slots Elements section. Clicking this button gives a dropdown menu	
	Aggregate Ports#	-
	Assets and Dimensions#	-

Field Name	Field Description	
	Card Aliases	Click this button to open the **Card Aliases** screen. Use this screen to enter an alias name for card slot
	Card Features#	-
	Cards Hierarchy#	-
	Copy Cards	Click this button to open the **Copy Card** screen.Use this screen to create a copy of the card slot record
	Delete Ports	Click this button to delete selected ports
	Manage Service Type Details	Click this button to open the **Network Element Service Type** Screen. Use this screen to view and update list of service types
	Split Ports#	-
	Utilisation Thresholds	Click this button to open the **NE Utilisation Thresholds** screen. Use this screen to view default thresholds defined for this screen
Port Details ➔ Parent Ports		
Add Port Attributes	Click  to open the **Port Parameters** screen. Use this screen to add port parameters like 'CLIP SUPPORT' which holds the values 'Y' or 'N'. The default value is 'N'	
Alias#	-	
Slot	This is a non-editable field for the card slot	
Port Name	It is a unique, non-editable field for the port name	
Service Type	Double click this field to view and update list of values	
Capacity	It is a non-editable field for the capacity, speed or bandwidth for the selected port	
Status	It is a dropdown list to select the current port status	
Tool Palette	This button is activated only when information is entered in the Port Details tab. Clicking this button gives a dropdown menu	

Field Name	Field Description	
	Child Port Aliases#	-
	Parent Port Aliases#	-
	Port Aliases Procedure#	-
	Port configuration#	-
Port Details ➔ Circuit Reservation		
Name	It is a non-editable, autopopulated field to specify the Name of the active circuit using this port. A circuit may also be reserved	
Status	It is an auto-populated field to specify the current circuit status. If the status is Reserved, double click this field to display the **Circuit Reserving this Port** screen	
Port Details ➔ Cable Reservation		
Name	It is a non-editable, auto-populated field to specify the name of the cable sheath	
Core	It is a non-editable, auto-populated field to specify the core of the cable connected to the port	
Cable Status	It is a non-editable, auto-populated field to specify the status of the cable. For example, Inservice and Planned	
Unnamed	It is a non-editable, auto-populated field to indicate if the circuit connection is unnamed. Select **Y** or **N**	
Additional Port Details ➔ Parent Ports		
Port Name	It is a unique, non-editable, auto-populated field to specify the generic port name	
Internal Connection	It is a non-editable field to specify the connections within the network element. This is used when the network element has no hierarchy, that is, no parent or child ports. These types of network elements are called passive devices	
Alarm Name#	-	
Telephone Number#	-	
Port Usage	Use LOV to select the usage of port	
Physical Port	It is a flag to indicate if the port is physical or logical. **Y** (Yes) indicates that the port is physical	

Field Name	Field Description
Displayed in GUI	It is a flag to indicate if the port is displayed in the Clarity Realtime GUI. **Y** (Yes) indicates that the port is displayed
Connections ➔ Parent Ports	
Port Name	It is a unique, non-editable, auto-populated field to specify the generic port name
Connector Type	Use LOV to select the connector type used to plug a patch cable into the port of the network element
Frame Container/ Network Element	This is a non-editable field to specify the port's frame container name
Frame Unit/ Port Name	This is a non-editable field to specify the port's frame unit name
Cable Sheath	This is a non-editable field to specify the port's cable sheath name
Cable Core Number	This is a non-editable field to specify the port's cable core number

Fields and buttons marked with # are not used.

3.3.1 Creating Network Elements

The Network Elements screen is used to create:

- Network Elements
- Cards
- Ports

Creating Network Element Records

Prerequisites to proceed: If ports are added using a Port Template, ensure that a template has been created.

A network element record refers to the fields in the Network Elements section of the screen.

To create a network element record:

1. Navigate to the **Network Elements** screen.
2. Enter information in the mandatory fields of the **Network Elements** section.
3. Enter information in the **Slot, Card Type** and **Card Status** fields of the **Cards Slots** section.

   Note: The 'MAIN UNIT' card is auto-populated for every NE. But it should not be used to add ports.
4. Add ports in the **Port Details** and **Additional Port Details** sections of the screen.

   Note: This can be done manually or automatically by applying a Port Template.
5. Click **Save**. A message appears, "*Your changes have been successfully saved"*.

6. Click **OK.** The changes are saved to the database.

   Note:

   i. Fill in the details in all mandatory fields before making changes in the Network Elements section.

   ii. The screen should not define more than one NE in a given switch area code.

Creating Card Records

A card record is created in the Card Slots section of the Network Elements screen.

Note: Only one card can be created for every NE based on the type selected in the Network Elements section. The MAIN_UNIT is populated automatically.

To create a card record:

1. Navigate to the **Network Elements** screen.
2. Query the required network element record. Matching results appear.

   Note: For details, see Querying a Network Element.
3. Select the details in the **Slot** field and click **Insert**. A new row appears.
4. Enter information in the **Slot** field.

   Note: The naming convention for slot is ‘00’.
5. Enter the type of card using the LOV, in the **Card Type** field.

   Note: The card types that are available for selection are limited by the network element type selected in the Network Elements section. For details, see the Card Models reference screen in the Clarity Operations Manual.
6. Select the status from the dropdown list in the **Card Status** field.
7. Click **Save**. A message appears, *“Your changes have been successfully saved”.*
8. Click **OK**. The card slot record is saved in the database.

Creating Port Records

Port records are created in the **Port Details** and **Additional Port Details** sections of the Network Elements screen. Ports can be added manually or using a port template.

To create a port record:

1. Navigate to the **Network Elements** screen.
2. Query the required network element record. Matching results appear.

   Note: For details, see Querying a Network Element.
3. Select the card slot record in the **Card Slots** section.
4. Click **Port Details**.

5. Click **Insert.** The screen enters insert mode.
6. Enter information in the **Parent Ports** section.
7. Click **Additional Port Details** and enter any additional details for the port.
8. Click **Save**. A message appears, "*Your changes have been successfully saved"*.
9. Click **OK.** The changes are saved to the database.

3.3.2 Applying Port Templates

Prerequisites to proceed: A breakdown must exist before you can apply a port template. You should build the templates up from the lowest level of the Parent Child Hierarchy.

The Network Elements screen can be used to create and apply port templates. This section describes how to apply a Port Template to create ports automatically. Use the **Add Ports from Template** screen for this procedure.

To apply a port:

1. Navigate to the **Network Elements** screen.
2. Query the required network element record. Matching results appear.

   Note: For details, see Querying a Network Element.
3. Select the network element record that requires ports.
4. Click **Create Ports**. The **Add Ports from Template** screen appears.
5. Select a **Port Breakdown** Template in the **Port Template** field using the LOV.
6. Enter information in the **Port Slot Number**.
7. Select the checkbox for **Use Prefix** and enter information in the adjacent field.
8. Click **Add Ports**. The ports are added to the **Parent Ports** section.
9. Click **Save**. A message appears, "*Your changes have been successfully saved"*.
10. Click **OK.** The changes are saved to the database.

3.3.3 Copying Network Element Records

The Copy Network Element screen is used to copy the current network element settings to another location.

To copy a network element record:

1. Navigate to the **Network Elements** screen.
2. Query the required network element record. Matching results appear.

   Note: For details, see Querying a Network Element.
3. Click **Copy Network Element**. The Copy Network Element screen appears.

4. Select a location using the LOV in the **Copy Network Element** screen.
5. Click **Copy Network Element**. . A message appears, "*Network element was successfully created. Do you want to save the changes?"*
6. Click **Yes.** A message appears, "*Your changes have been successfully saved"*.
7. Click **OK.** The changes are saved to the database.

3.3.4 Copying Card Records

Use the Copy Card screen to copy existing card records to a network element record of the same network element type. The card copied will have a Proposed status. All ports that are copied will also have a Proposed status.

Port information like Port name, Port usage, Capacity, Cable and card attributes like Card serial number, Card location, Card model can be copied following these steps.

To copy a card record:

1. Navigate to the **Network Elements** screen.
2. Query the required network element record. Matching results appear.

   Note: For details, see Querying a Network Element.
3. Click **Tool Palette ➔ Copy Cards** in the card slots section . The Copy Cards screen appears.
4. Select values for the **NE Location**, **NE Type** and **NE Index** fields using the LOV.
5. Click **Copy Selected Cards.** A message appears, "*Card slot was successfully created. Do you want to save your changes?"*
6. Click **Yes.** A message appears, "*Your changes have been successfully saved*."
7. Click **OK.** The changes are saved to the database.

3.3.5 Defining Network Element Parameters

Prerequisites to proceed: Values must exist in **Network Element Parameter Validation** and **Network Element Details Template** screens before defining Network Element Parameters.

Use the Network Element Parameters screen to load predefined network element attributes. For example, MSC BASED, CENTREX ENABLED, INSTALLED CAPACITY and ACTIVATION TYPE.

To define the network element parameters:

1. Navigate to the **Network Elements** screen.
2. Query the required network element record. Matching results appear.

   Note: For details, see Querying a Network Element.
3. Click **Tool Palette ➔ Network Element Parameters** in the **Network Elements** section. The Network Element Parameters screen appears.

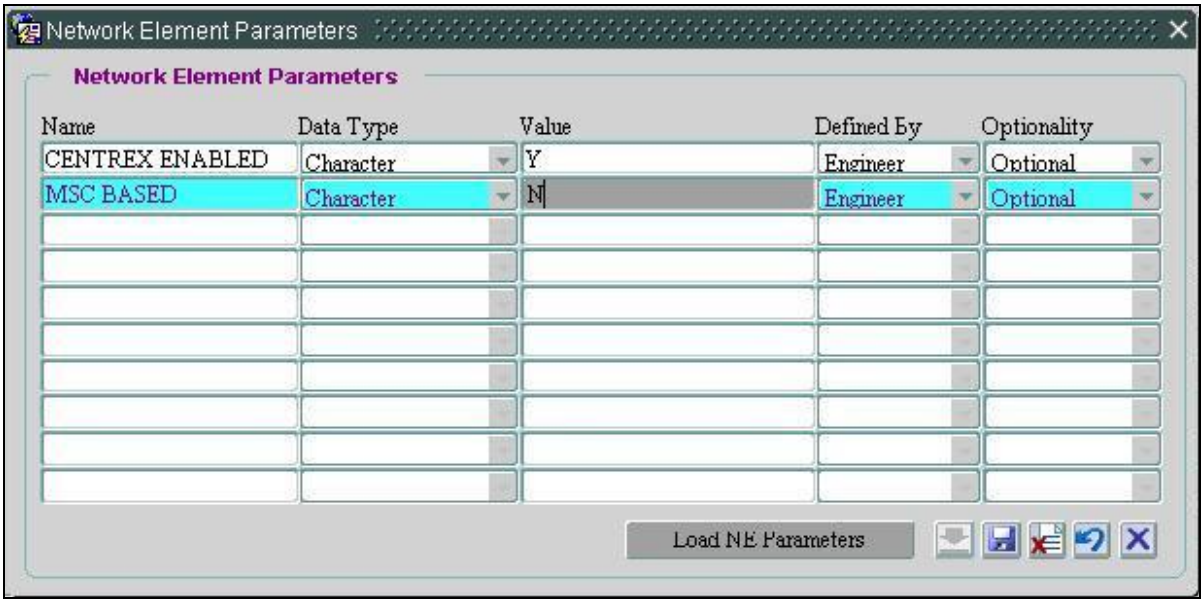

Figure 8: Network Element Parameters

4. Click **Load NE Parameters**. The valid Network Element Detail Templates screen appears.
5. Select a **Network Element Details** template name.

   Note: Values can be selected from the dropdown list. For example, OCB-TEMPLATE, E10B-TEMPLATE, CDOT-TEMPLATE, AXE10-TEMPLATE, 5ESS-TEMPLATE, NEAX-TEMPLATE, FETEX-TEMPLATE, WLL-TEMPLATE, DLC-TEMPLATE and ANRAX-TEMPLATE.
6. Click **OK**. The Network Element Parameters screen is populated with parameter values from the selected Network Element Details Template.
7. Click **Save**. A message appears, "*Your changes have been successfully saved".*
8. Click **OK.** The changes are saved to the database.

3.3.6 Querying a Network Element

This section describes how to query the Network Elements screen to display network element unit records.

To query a network element record:

1. Navigate to the **Network Elements** screen.
2. Click **Query**. The screen enters query mode.
3. Enter the search criteria in the relevant fields in the **Circuit Details** section.
4. Click **Query** again. Matching records appear.

   Note: If the search criteria is not specified, all network element records appear.

3.3.7 Modifying Network Element Records

To modify a network element record:

1. Navigate to the **Network Elements** screen.
2. Query the required network element record. Matching results appear.

   Note: For details, see Querying a Network Element.
3. Highlight the row in which the existing value has to be changed.
4. Enter the new value and click **Save**. A message appears, "*Your changes have been successfully saved"*.
5. Click **OK.** The changes are saved to the database.

3.3.8 Deleting Network Element Records

This section describes how to delete records in the Network Elements screen. This includes network elements, cards and ports.

Note: You cannot delete a network element record or card slot record if it is being used by a circuit, or has ports attached. You cannot delete the main unit card at any time, only individual ports. The main unit card is created by default.

Deleting Network Element Records

To delete a network element record:

1. Navigate to the **Network Elements** screen.
2. Query the required network element record. Matching results appear.

   Note: For details, see Querying a Network Element.
3. Select the details in the **Type** field in the **Network Elements** section.
4. Click **Delete**. The record is deleted.
5. Click **Save** A message appears, "*Your changes have been successfully saved"*.
6. Click **OK.** The changes are saved to the database.

Deleting Card or Slot Records

To delete a network element card/slot record:

1. Navigate to the **Network Elements** screen.
2. Query the required network element record. Matching results appear.

   Note: For details, see Querying a Network Element.
3. Select the details in the **Slot** field in the **Card Slots** section.
4. Click **Delete**. A message appears, asking if you want to delete all the child cards and ports on this card.

5. Click **Yes**. The record is deleted.
6. Click **Save** A message appears, "*Your changes have been successfully saved"*.
7. Click **OK.** The changes are saved to the database.

Deleting Port Records

To delete a port record:

1. Navigate to the **Network Elements** screen.
2. Query the required network element record. Matching results appear.

   Note: For details, see Querying a Network Element.
3. Select the record in the **Parents Ports** section that you want to delete.
4. Click **Delete**. The record is deleted.
5. Click **Save.** A message appears, *"Your changes have been successfully saved".*
6. Click **OK.** The changes are saved to the database.

   Note: A parent port cannot be deleted if either the parent or child port has a circuit assigned.

3.4 Server Equipment

The Server Equipment screen is used to maintain the relation between switching units. It displays all the Remote Switching Units (RSUs), Rural Automatic Exchanges (ANRAXs) and Digital Loop Carriers (DLCs) which are connected to a Main Switching Unit (MSU).

Tasks that can be performed using this screen are:

- Querying a record
- Adding an RSU to an MSU
- Deleting an RSU

Note: MSU records cannot be deleted as they are non-editable.

To navigate to the Server Equipment screen:

1. Click **Inventory** on the Clarity home page. A dropdown list appears.
2. Select **Components ➔ Network Elements Feature Hierarchy**. The Server Equipment screen appears.

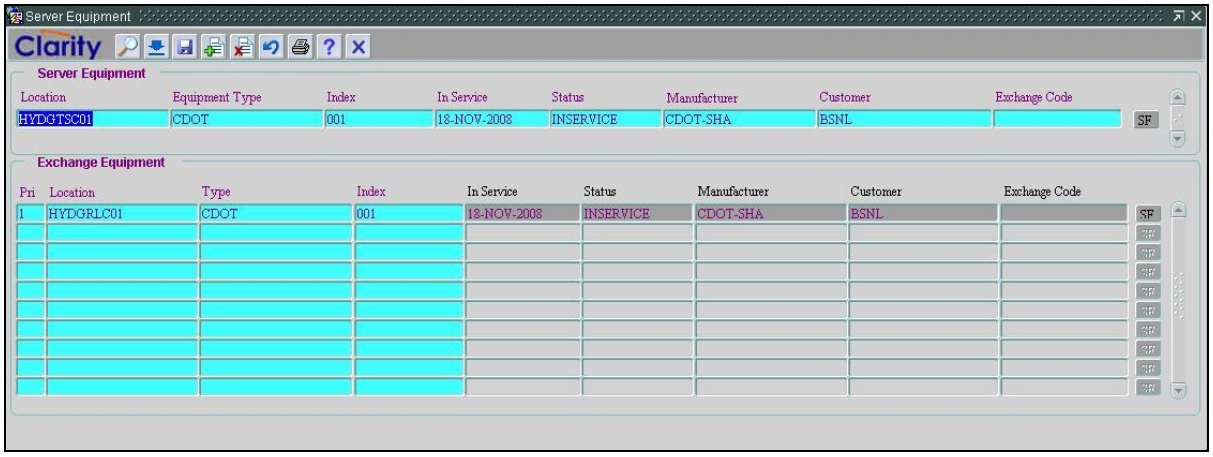

Figure 9: Server Equipment

Field References

The field names and description of all the fields that appear in the Server Equipment screen are given below:

Table 8: Field References for Server Equipment

Field Name	Field Description
Server Equipment	
Location	This is a mandatory field. Use LOV to select the location for the server equipment
Equipment Type	This is a mandatory field. Use LOV to select the Valid abbreviation for the server equipment type
Index	This is a non-editable field with a sequence number for the server equipment
In Service	This is a mandatory, auto-populated date field to specify the network element creation date
Status	This is a mandatory field. Use LOV to select Current status for the server equipment
Manufacturer	This is a mandatory field. Use LOV to select the Abbreviation for the Manufacturer
Customer	This is a mandatory field. Use LOV to select the Abbreviation for the customer
Exchange Code#	-
SF#	-
Exchange Equipment	
Pri	This is an auto-populated field to specify the Priority of the Exchange Equipment record. The default value is ‘1’
Location	This is a mandatory field. Use LOV to select the location for the server equipment screen

Field Name	Field Description
Type	This is a mandatory field. Use LOV to select the Valid abbreviation for the type of the exchange equipment record
Index	This is a mandatory, non-editable field with a sequence number for the exchange equipment record
In Service	This is a non-editable, auto-populated date field to specify the network element creation date
Status	This is a non-editable, auto-populated field to specify the current status for the exchange equipment record
Manufacturer	This is a non-editable, auto-populated field to specify the abbreviation for the Manufacturer
Customer	This is a non-editable, auto-populated field to specify the abbreviation for the customer
Exchange Code#	-
SF#	-

Fields/ buttons marked with # are not used.

3.4.1 Querying a Record

To query a record:

1. Navigate to the **Server Equipment** screen.

   Note: The Server Equipment screen is in query mode.

2. Type the search criteria in the relevant field in the **Server Equipment** section.
3. Click **Query**. Matching records appear.

3.4.2 Adding an RSU to an MSU

This section describes how to add an RSU to an MSU.

Note:

i. The records in the **Server Equipment** section to which RSUs are added are treated as MSUs.

ii. This procedure is same for adding an ANRAX and adding an DLC.

To add an RSU to an MSU:

1. Navigate to the **Server Equipment** screen.
2. Query the required server equipment record. Matching results appear.

   Note: For details, see Querying a Record.

3. Select the relevant record in the **Server Equipment** section.
4. Type the values in the mandatory fields of the **Exchange Equipment** section.
5. Click anywhere on the screen to automatically populate the other fields in the Exchange Equipment section.
6. Click **Save.** A message appears, "*Your changes have been successfully saved"*.
7. Click **OK.** The changes are saved to the database.

3.4.3 Deleting an RSU

This section describes how to delete an RSU from the Server Equipment screen.

Note: This procedure is same for deleting an ANRAX and DLC.

To delete an RSU:

1. Navigate to the **Server Equipment** screen.
2. Query the required server equipment record. Matching results appear.

   Note: For details, see Querying a Record.
3. Select the relevant record in the **Exchange Equipment** section.
4. Click **Delete.** The record is deleted.
5. Click **Save** A message appears, "*Your changes have been successfully saved"*.
6. Click **OK.** The changes are saved to the database.

3.5 Management Systems

The Management Systems screen is used to maintain a list of valid Network Element Management Systems (NEMS) configuration details.

This screen is used to query, create and delete management system details.

Tasks that can be performed using this screen are:

- Creating a management systems record
- Querying a management systems record
- Deleting management systems record

To navigate to the Management Systems screen:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears.
2. Select **Components ➔ Management Systems**. The Management Systems screen appears.

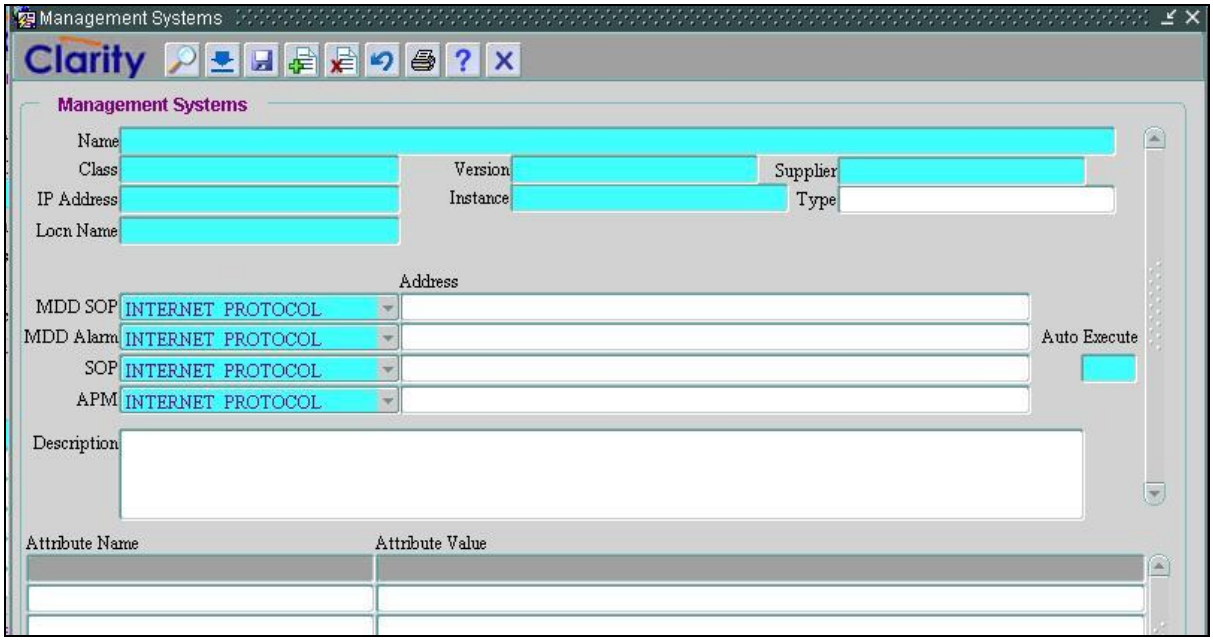

Figure 10: Management Systems

Field References

The Field Names and Description of all the fields that appear in the Management Systems screen are given below:

Table 9: Field References for Management Systems

Field Name	Field Description	
Name	This is an auto-populated field to specify the name of the management systems. This field is auto-populated with the information from the Class, Version and Instance fields	
Class	This is a mandatory field. Use LOV to select the NEMS class	
Version	This is a mandatory field to specify the NEMS software version	
Supplier	This is a mandatory field. Use LOV to select the company name providing NEMS	
IP Address	This is a mandatory field to specify the Internet address of the NEMS	
Instance	This is a mandatory field to specify the NEMS instance identifier	
Type	This is an editable field to specify the additional grouping attribute	
Locn Name	Use LOV to select the location of the NEMS	
MDD SOP	This is a dropdown list to select the class of interface for Mediation Device Driver, Service Order Provisioning. Select either Internet Protocol or NFS	
	Address	This is an editable field to specify the Address for Mediation Device Driver, Service Order Provisioning class
MDD Alarm	This is a dropdown list to select the class of interface for the Mediation Device	

Field Name	Field Description	
	Driver alarm. Select either Internet Protocol or NFS	
	Address	This is an editable field to specify the Address for Mediation Device Driver alarm class
SOP	This is a dropdown list to select the class of interface for Service Order Provisioning class. Select either Internet Protocol or NFS	
	Address	This is an editable field to specify Address for Service Order Provisioning class
APM	This is a dropdown list to select the class of interface for Alarm Processing Module. Select either Internet Protocol or NFS	
	Address	This is an editable field to specify Address for Alarm Processing Module class
Auto Execute	This is a mandatory field to indicate whether automatic service order provisioning is required or not. Valid entries are **Y** or **N**	
Description	This is a mandatory text field to describe the management system	
Attribute Name	This is an editable field for the name of an attribute of the selected Management System. For example, INPUTHOST	
Attribute Value	This is an editable field that displays the expected value for the attribute	

3.5.1 Creating a Management Systems Record

To create management systems record:

1. Navigate to the **Management systems** screen.
2. Enter information in the **Class**, **Version**, **Supplier**, **IP Address**, **Instance**, **Locn Name**, and **Description** fields.
3. Enter the IP Address and Port relevant to the Management System in the **Address** field.
4. Enter **Y** as the default value in the **Auto Execute** field.
5. Enter information in the **Class**, **Version** and **Instance** fields. The **Name** field will be populated.
6. Click **Save**. A message appears, "*Your changes have been successfully saved"*.
7. Click **OK.** The changes are saved to the database.

3.5.2 Querying a Management System Record

This section describes how to query the Management systems screen to display management systems records.

To query a management systems record:

1. Navigate to the **Management systems** screen.
2. Click **Query**. The screen enters query mode.
3. Enter the search criteria in the relevant field in the **Circuit Details** section.
4. Click **Query** again. Matching records appear.

3.5.3 Deleting a Management System Record

To delete a record from the management system:

1. Navigate to the **Management systems** screen.
2. Query the required network element record. Matching results appear.

   Note: For details, see Querying a Management System Record.
3. Select the details of the row in the **Management systems** section that has to be deleted.
4. Click **Delete**. The record is deleted.
5. Click **Save.** A message appears, "*Your changes have been successfully saved"*.
6. Click **OK.** The changes are saved to the database.

3.6 Frames

The Frames screen is used to represent the physical infrastructure that connects elements in a telecommunication network. These frames are used to define passive elements in telecommunications like Main Distribution Frame (MDF), Pillar and Distribution Point (DP). Each frame must reside at a location that is specified in the Clarity system.

A frame consists of a single container that is configured with frame units and frame appearances. These represent the actual physical connection points (either electrical or optical).

The following records are created in the Frames screen:

- Frame Containers
- Frame Units
- Frame Appearances

Note: Frame Containers are mapped to passive elements like MDFs, DPs and Pillars. Frame Units are mapped to Tag blocks and Frame Appearances are mapped to pins of Tag blocks.

One frame container can include many frame units. While the configuration of frame appearances for a frame unit is defined in the Frame Unit Templates reference screen, the number of frame appearances for a frame unit is defined in the Frame Unit Product Types reference screen.

Tasks that can be performed using this screen are:

- Creating a frame record

- Querying a record
- Deleting a record

To navigate to the Frames screen:

1. Click **Inventory** on the Clarity home page. A dropdown list appears.
2. Select **Components ➔ Frames**. The Frames screen appears.

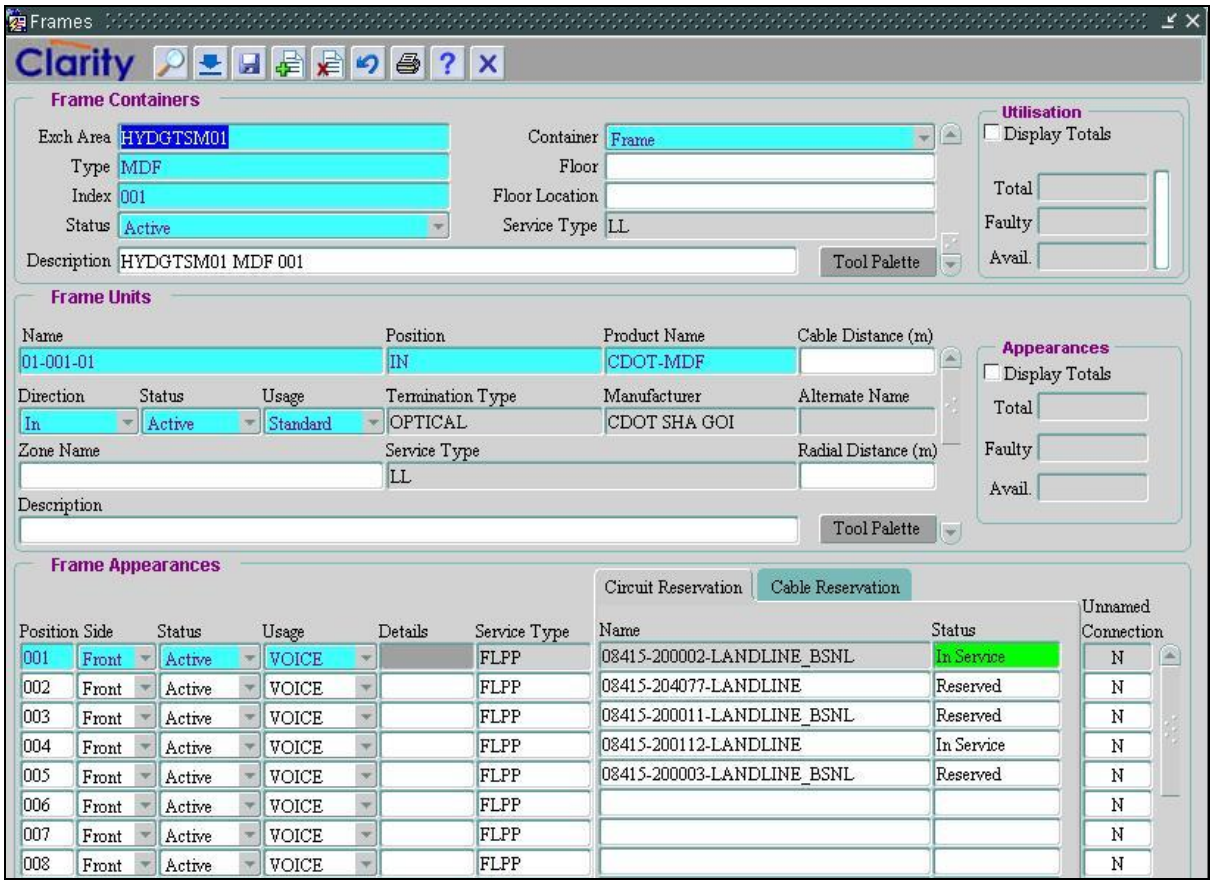

Figure 11: Frames

Field References

The field name and description of all the fields that appear in Frames are given below:

Table 10: Field References for Frames

Field Name	Field Description
Frame Containers	
Exch Area	This is a mandatory field for the exchange area of the frame container. Use LOV to select a value
Type	This is a mandatory field for the type of frame container. Use LOV to select a value. For example, MDF, PILLAR, DP-DL and DP-DLP **Note:** Values for this field are set up in the **Frame Container Types** reference screen. The appropriate value should be selected from the LOV

Field Name	Field Description	
	based on the naming conventions given below.	
Index	This is a non-editable, auto-populated field with the instance of the frame container type at the selected location. The default value is '001'	
Status	This is a mandatory field that defines the status of the container. Use the dropdown list to select a value. For example, spare, active, bad pin	
Description	This is an editable, auto-populated field with the location, frame container type and the index when the record is saved. For example, HYDGTS0001	
Container	This is a mandatory field to define whether the container is a frame or a rack. Use the dropdown list to select a value **Note:** The default value is 'Frame'.	
Floor#	-	
Floor Location#	-	
Service Type	Double click this field to view and update the list of values	
Tool Palette	This button is enabled only when information is entered in the Frames Container section. Clicking this button gives a dropdown menu **Note:** Only the Bulk Update Service Types, Copy Frame Container and Manage Service Type Details options are used	
	Assets and Dimensions#	-
	Attach and View Files#	-
	Bulk Update Service Types	Click this button to open the **Bulk Update Service Types** screen. Use this screen to update bulk update pins with service types
	Copy Frame Container	Click this Button to open the **Copy Frame Container** screen. Use this screen to copy the details of an existing frame container record to help in creating a new frame container record
	Costed Items#	-

<table>
<tr><th>Field Name</th><th colspan="3">Field Description</th></tr>
<tr><td></td><td>Manage Service Type Details</td><td colspan="2">Click this button to open the Frame Container Service Types Screen. Use this screen to view and update list of service types</td></tr>
<tr><td>Utilisation</td><td colspan="3">This section reflects the total number of allocated active pins on all frame units, displayed as a percentage. The bar graph appears in different colours, depending on the usage:
Green: 0% - 49%
Orange: 50% - 79%
Red: 80% - 100%
The statuses used in the Utilisation calculations appear next to the Utilisation field as an abbreviation. For example, PADBL stands for Planned, Active, InActive, Bad Port and Locked</td></tr>
<tr><td colspan="4">Frame Units</td></tr>
<tr><td>Name</td><td colspan="3">This is a mandatory field to identify the unique frame unit
Note: This field does not accept spaces in the name.</td></tr>
<tr><td rowspan="3">Position</td><td colspan="3">This is a mandatory, alpha-numeric field to describe the Exchange side or Line side of a frame. For example, IN, OUT, Line_Side</td></tr>
<tr><td>Naming Convention</td><td>Description</td><td>Example</td></tr>
<tr><td>Naming conventions for different frames while entering values in the Type field of the Frame Containers section</td><td>MDF: For an MDF exchange area, select ‘MDF’
Pillar: For a Pillar exchange area, select ‘PILLAR’
DP: For a DP exchange area, select ‘DP-DL’ or ‘DP-DLP’</td><td>Example for MDF: HYDGTSM01 – MDF
Example for Pillar: HYDGTS0001 – PILLAR
Example for DP: HYDGTS000100001 – DP-DLP</td></tr>
<tr><td>Naming conventions for the Name field of the Frame Units section</td><td>MDF: For an MDF exchange area, the name will contain the index, vertical number and tag block number
Pillar: For a Pillar exchange area, the name will be the tag block number
DP: For a DP exchange area, the name will be the DP name</td><td>Example for MDF: 001-01-02-10-001</td></tr>
</table>

Field Name	Field Description		
	Naming conventions for the **Position** field of the Frame Units section	**MDF**: If the frame is 'MDF' type, the position value will be **Line_Side** **Pillar**: If the frame is 'PILLAR' type, the position values will be **IN** and **OUT** **DP**: If the frame is 'DP' type, the position value will be **IN**	-
Product Name	This is a mandatory field to select the frame unit product type using the LOV		
Cable Distance (m) #	-		
Direction	This is a dropdown list to select the direction of the frame unit. For example, In or Out		
Status	This is a dropdown list to select the status of the frame unit. For example, Spare, Planned and Active. The default value is 'Active'		
Usage	This is a dropdown list to select the usage at the specified position. For example, Standard and Terminate		
Termination Type	This is a non-editable, auto-populated field to specify the termination type of the frame unit **Note:** This field gets populated when a Product Name is selected.		
Manufacturer	This is a non-editable, auto-populated field to specify the manufacturer of the frame unit **Note:** This field gets populated when a Product Name is selected.		
Alternate Name	This is a non-editable, auto-populated field to specify an alternate name for the frame unit		
Zone Name#	-		
Service Type	Double click this field to view and update the list of values		
Radial Distance (m)#	-		
Description	This is an alpha-numeric field to further describe the frame unit		
Tool Palette	This button is activated only when information is entered in the Frames Container section. Clicking this button gives a dropdown menu **Note:** The **Assets and Dimensions** option is not used.		

Field Name	Field Description	
	Alternate Names	Click this Button to open the **Alternate Frame Unit Names** screen. Use this screen to add, modify or delete alternative names for the selected frame unit
	Assets and Dimensions[#]	-
	Copy Frame Unit	Click this Button to open the **Copy Frame Unit** screen. Use this screen to copy the details of an existing frame unit record to help in creating a new frame unit record
	Delete Frame Appearances	Click **Yes** to confirm the deletion of all the frame appearances belonging to the selected frame unit
	Lock/Unlock Appearances	Click this button to open the **Lock/Unlock Frame Appearances** screen. Use this screen to lock or unlock the selected frame unit's frame appearances
	Manage Service Type Details	Click this button to open the **Frame Unit Service Types** Screen. Use this screen to view and update list of service types
Appearances	This section reflects the total number of allocated active pins on the frame unit, displayed as a percentage in the Total, Faulty and Avail	
Frame Appearances		
Position	This is an auto-populated field to specify the position in the frame unit **Note**: If Product Name field in Frame Units section has no positions attached, these pins have to entered manually.	
Side	This is a non-editable field to specify the side of the frame appearance. Values are Front and Rear	
Status	This is an auto-populated field to specify the status of the frame appearance. For example, Spare, Planned and Active **Note**: Automatically populated with the product name selected in the Frame Units section.	
Usage	This field is auto-populated with the product name selected in the Frame Units section, to specify the usage at the specified position. For example, Voice, Data and Wideband	

Field Name	Field Description
Details	This is an alpha-numeric field to enter the details of the frame appearance
Service Type	Double click this field to view and update list of values
Frame Appearances ➔ Circuit Reservation	
Name	This is a non-editable, auto-populated field to specify the name of the circuit reserving the frame appearance
Status	This is a non-editable, auto-populated field to specify the status of the circuit
Unnamed Connection	This is a non-editable, auto-populated field to indicate whether the circuit connection is an unnamed connection or not. For example, Y, N
Frame Appearances ➔ Cable Reservation	
Name	This is a non-editable, auto-populated field to specify the name of the cable sheath reserving the frame appearance
Core	This is a non-editable, auto-populated field to specify the core of the cable connected to the port
Cable Status	This is a non-editable, auto-populated field to specify the status of the cable. For example, In service, Planned

Fields/ buttons marked with # are not used.

3.6.1 Creating a Frame Record

Prerequisites to proceed: Frame Container types, Frame Unit Templates and Frame Unit product types must be present in the database. All the fields in the Locations/Sites screen should also be populated before creating a Frame Record.

Note: If not populated, Frame Container types, Frame Unit Templates and Frame Unit product types respectively can be populated by navigating to:

- Inventory ➔ Reference Data ➔ Frames ➔ Frame Container Types
- Inventory ➔ Templates ➔ Frame Units
- Inventory ➔ Reference Data ➔ Frames ➔ Frame Unit Product Types

Creating Frame Containers

Frame containers are parent records to define Frame units and Frame appearances.

To create a frame container record:

1. Navigate to the **Frames** screen.
2. Enter information in the mandatory fields in the **Frame Containers** section.
3. Click **Save**. A message appears, "*Your changes have been successfully saved"*.

4. Click **OK**.
5. Enter information in the mandatory fields in the **Frame Units** section. The Frame Appearances section is automatically populated if a Product Name is selected.
6. Click **Save**. A message appears, "*Your changes have been successfully saved"*.
7. Click **OK.** The changes are saved to the database.

Creating Additional Frame Units

Additional Frame Units are used to define multiple tag blocks for a Frame container. A tag block contains multiple frame appearances.

To create an additional frame:

1. Navigate to the **Frames** screen.
2. Query the required Frame Container. Matching results appear.

   Note: For details, see Querying Frame Container Records

3. Place the cursor in the **Name** field in the Frame Units section, and click **Insert**. The Frame Units and Frame Appearances section are cleared.

   Note: For the first record, it is not essential to click **Insert**.
4. Enter the Frame Unit information in the mandatory fields and click **Save**. The Frame Appearances section is automatically populated if a Product Name is selected.

3.6.2 Querying a Record

The following records can be queried using the Frames screen:

- Frame containers
- Frame units
- Frame appearances

Querying Frame Container Records

This section describes how to query the **Frames** screen to display frame container records.

To query a frame container record:

1. Navigate to the **Frames** screen.
2. Click **Query**. The screen enters query mode.
3. Enter your search criteria in the **Frame Containers** section.

   Note: Use the % character as a wildcard. For example, entering HYD% displays all records that start with HYD. Double clicking **Query** without entering any search criteria displays all records.

4. Click **Query** again. Matching records appear.

Querying Frame Unit Records

Prerequisites to proceed: The parent frame container record must be displayed before querying the Frame Units section.

This section describes how to query the Frames screen to display frame unit records.

To query a frame unit record:

1. Navigate to the Frames screen.
2. Query the parent frame container record.

   Note: For details, see Querying a Record.
3. Place the cursor in the **Name** field, in the Frame Units section.
4. Click **Query**. The screen enters query mode.
5. Enter your search criteria in the **Frame Units** section.

   Note: Use the % character as a wildcard. For example, entering 01% displays all records that start with 01. Double-clicking **Query** without entering any search criteria displays all records.
6. Click **Query** again. Matching records appear.

Querying Frame Appearance Records

Prerequisites to proceed: The parent frame container and frame unit records should be displayed before querying the Frame Appearance section.

To query a frame appearance record:

1. Navigate to the **Frames** screen.
2. Query the parent frame unit record.

   Note: For details, see

   Querying Frame Unit **Records**.
3. Place the cursor in the **Position** field in the Frame Appearances section.
4. Click **Query**. The screen enters query mode.
5. Enter your search criteria in the **Frame Appearances** section.

   Note: Use the % character as a wildcard. For example, entering 001% displays all records that start with 001. To view all the records, double-click the query button without entering any search criteria.
6. Click **Query** again. Matching records appear.

3.6.3 Deleting Records

This section describes how to delete records in the Frames screen. This includes Frame Containers, elements, Frame Units and Frame Appearances.

Note: You cannot delete a frame container record or frame unit record if it is being used by a circuit or has frame apperances attached.

Deleting Frame Container Records

To delete a record from the Frame Containers section:

1. Navigate to the **Frames** screen.
2. Query the required frame container record. Matching results appear.

   Note: For details, see Querying Frame Container Records.
3. Click the **Exch Area** field in the Frame Containers section.
4. Click **Delete**.
5. Click **Save**. A message appears, "*Your changes have been successfully saved*".
6. Click **OK**. The changes are saved to the database.

Deleting Frame Unit Records

To delete a frame unit record:

1. Navigate to the **Frames** screen.
2. Query the required frame unit record. Matching results appear.

   Note: For details, see Querying Frame Unit Records.
3. Click the **Name** field in the Frame Units section.
4. Click **Delete**. The record is deleted.
5. Click **Save**. A message appears, *"Your changes have been successfully saved".*
6. Click **OK**. The changes are saved to the database.

Deleting Frame Appearances Records

This section describes the procedure to delete all frame appearance records from the Frames screen.

Note: A single frame appearance record cannot be deleted.

To delete frame appearances records:

1. Navigate to the **Frames** screen.
2. Query the required frame Container record. Matching results appear.

   Note: For details, see Querying Frame Unit Records.

3. Select the relevant record in the **Frame Units** section.
4. Click **Tool Palette ➔ Delete Frame Appearances**. A message appears, "*Are you sure you want to delete all the Frame Appearances belonging to this Frame Unit?"*
5. Click **Yes**. A message appears, "*Frame Appearances successfully deleted"*.
6. Click **OK.** The changes are saved to the database.

3.7 Manage Service Types

The Manage Service Types screen is used to add, modify and delete multiple service types for Network Elements and Frames.

This screen contains two tabs, Network Element Service Types and Frame Service Types.

Tasks that can be performed using the Manage Service Types screen are:

- Managing Service Types for a Network Element
- Managing Service Types for a Frame

To navigate to the Manage Service Types screen:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears.
2. Select **Components ➔ Manage Service Types.** The Manage Service Types screen appears, with the Network Element Service Types tab highlighted as the default one.

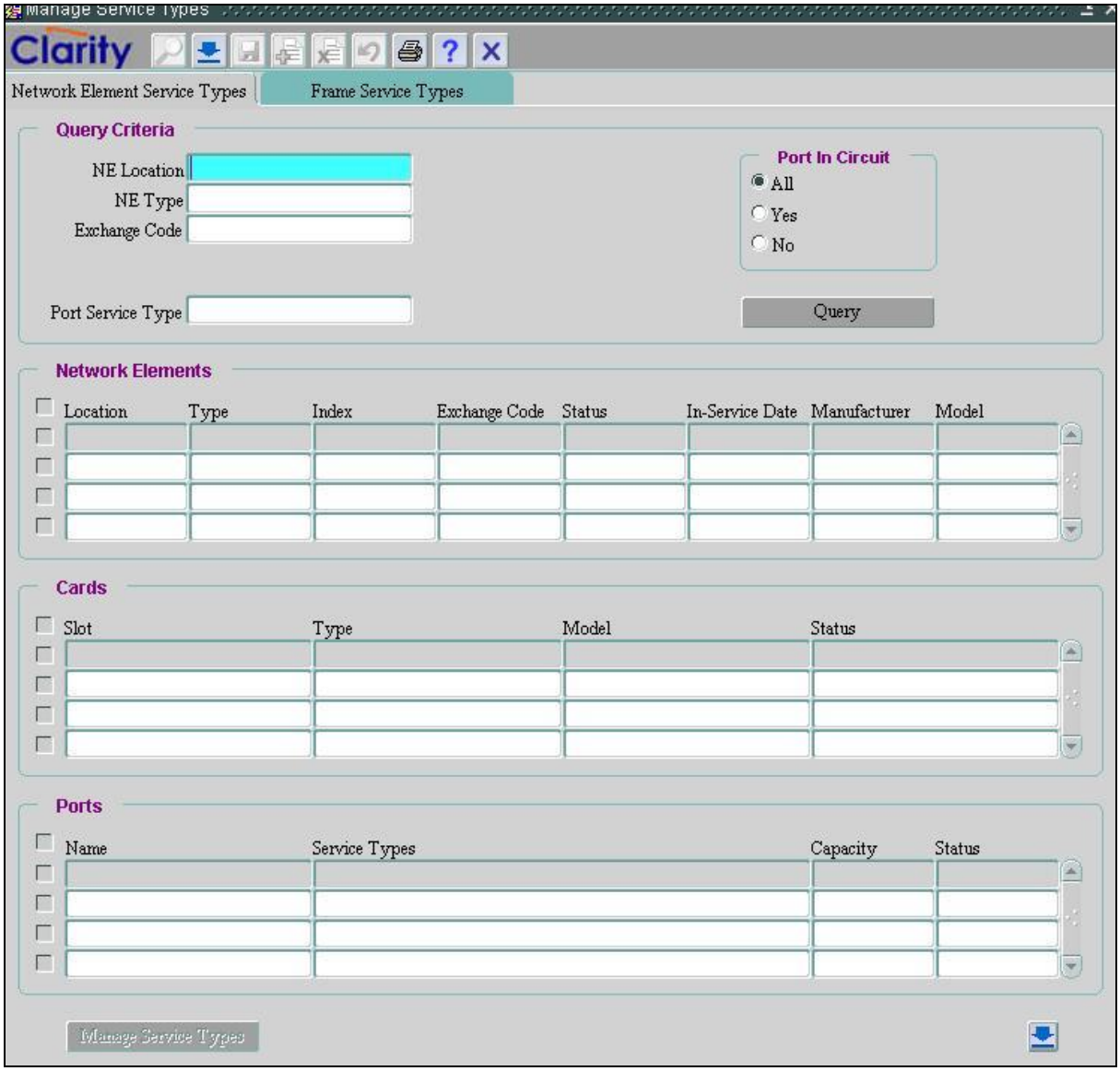

Figure 12: Manage Service Types

3.7.1 Network Element Service Types

Network Element Service Types is used to manage service types that are related to the network element found by the search criteria.

To navigate to Network Element Service Types:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears.
2. Select **Components ➔ Manage Service Types.** The Manage Service Types screen appears, with the Network Element Service Types tab highlighted as the default one.

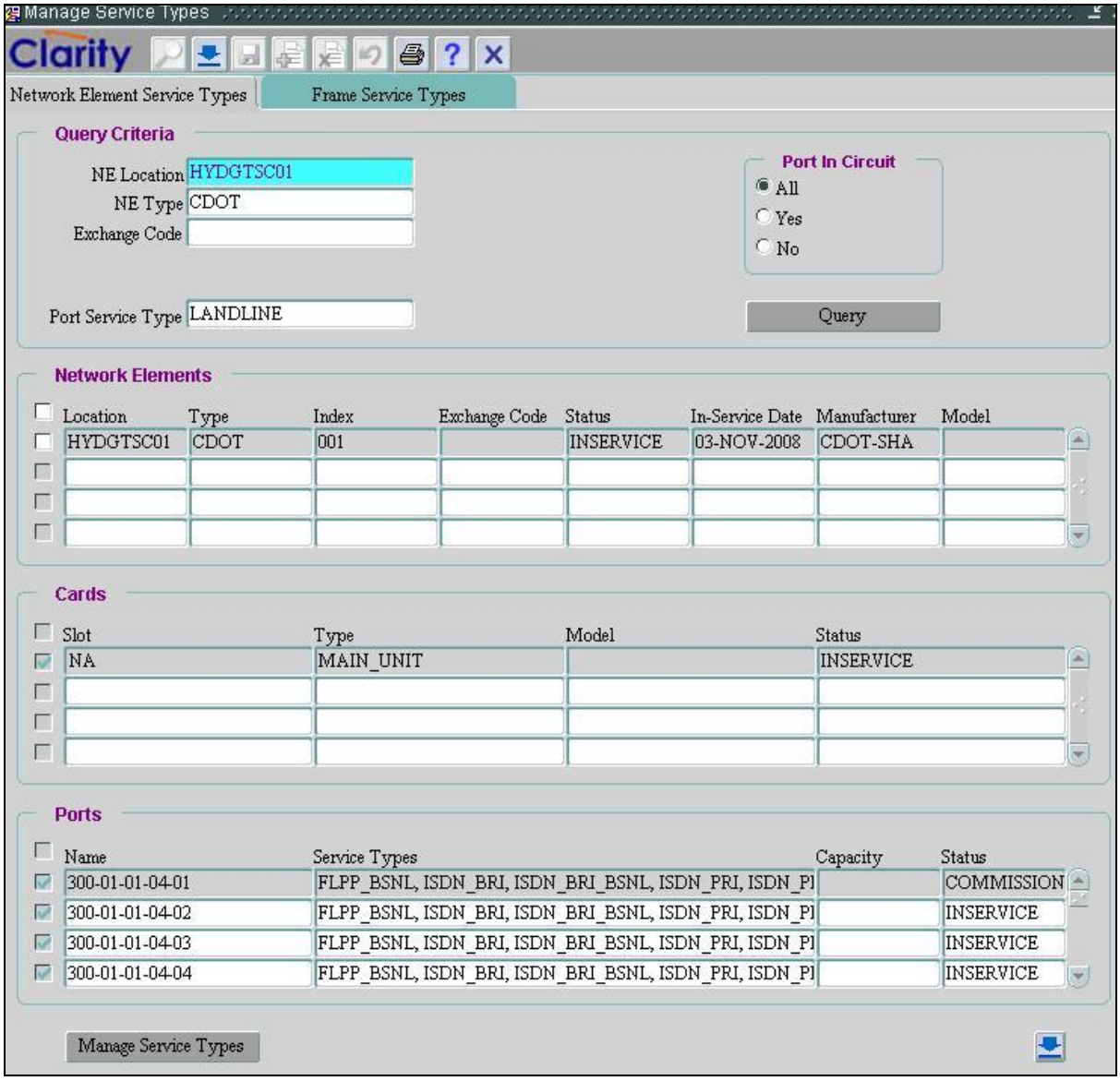

Figure 13: Network Element Service Types

Field References

The field names and description of all the fields that appear in the Network Element Service Types tab are given below:

Table 11: Field References for Network Element Service Types

Field Name	Field Description
Query Criteria	
NE Location	This is a mandatory field where the physical location of the network element has to be entered. Use LOV to select a value
NE Type	This is a mandatory field where a valid abbreviation for the network element type has to be entered. Use LOV to select a value
Exchange Code#	-

Field Name	Field Description	
Port Service Type	This is an optional field where a service type can be entered to filter the query	
Query	Click this button to find the network element based on the details entered in the query criteria	
Network Elements[##]		
Location	Physical location of the network element	
Type	Valid abbreviation for the network element type	
Index	Index number assigned to the network element	
Exchange Code[#]	-	
Status	Current status of the network element	
In-Service Date	Network element in-service date	
Manufacturer	The abbreviation for the manufacturer of the network element	
Model[#]	-	
Cards[##]		
Slot	The physical slot in the equipment chassis that the card occupies	
Type	Card type	
Model	The model number of the card	
Status	Current status of the card. For example, Active	
Ports[##]		
Name	Generic port name. Unique in context of NE instance	
Service Types	The service types supported by the ports	
Capacity[#]	-	
Status	Current port status. For example, INSERVICE	
	Click this button to navigate to the Manage Network Element Service Types screen	
	Service Types	
	Batch ID	Mandatory alpha-numeric unique code
	Service Type	This is a mandatory field for a valid service type. Use LOV to select a value

Field Name	Field Description	
Manage Service Types	Priority	The new priority for the service type
	Action	
	Action	This field contains a dropdown list to select the relevant action to be performed
	Add Service Types	Click this button to add service types
	Errors[##]	
	Location	Physical location of the network element/ frame
	Type	Valid abbreviation for the network element
	Index	Index number assigned to the network element
	Card Slot	The card slot position of the network element
	Port Name	The name of the port that has not changed
	Error	The reason for the error

Fields marked with [#] are not used.

All the fields in the sections marked with [##] are non-editable and auto-populated.

Managing Service Types for a Network Element

This section is used to add, modify or delete service types for a network element record.

To manage service types of a network element record:

1. Navigate to the **Network Element Service Types** tab.
2. Enter the valid NE location and NE type using the respective LOVs in the **Query Criteria** section.
3. Enter the service type in the **Port Service Type** field.

   Note: This is an optional field.
4. Click **Query**. The Network Elements, Cards and Ports sections are populated and the Manage Service Types button is enabled.

   Note: If the query criteria are invalid, a message appears, *"No records were retrieved for this query"*.
5. Select the relevant option in the **Port In Circuit** section. This filters the ports based on whether they are attached to the circuit (Yes) or not (No). 'All' is selected by default.

6. Select the relevant section for which you want to manage service types.

   Note: Selecting the Network Elements section enables the Cards section. Selecting Cards enables the Ports section.

7. Click **Manage Service Types**. A message appears if no checkbox is selected, asking if you wish to apply the service type action to all existing ports on the selected cards.

8. Click **No** to select the relevant section in the **Network Element Service Types** screen.

   Or

   Click **Yes** to continue. The Manage Network Element Service Types screen appears.

   Note: A message appears when you click 'No', asking you to select one or more network elements. Click **OK** to continue and select the relevant section. Then, repeat step 7.

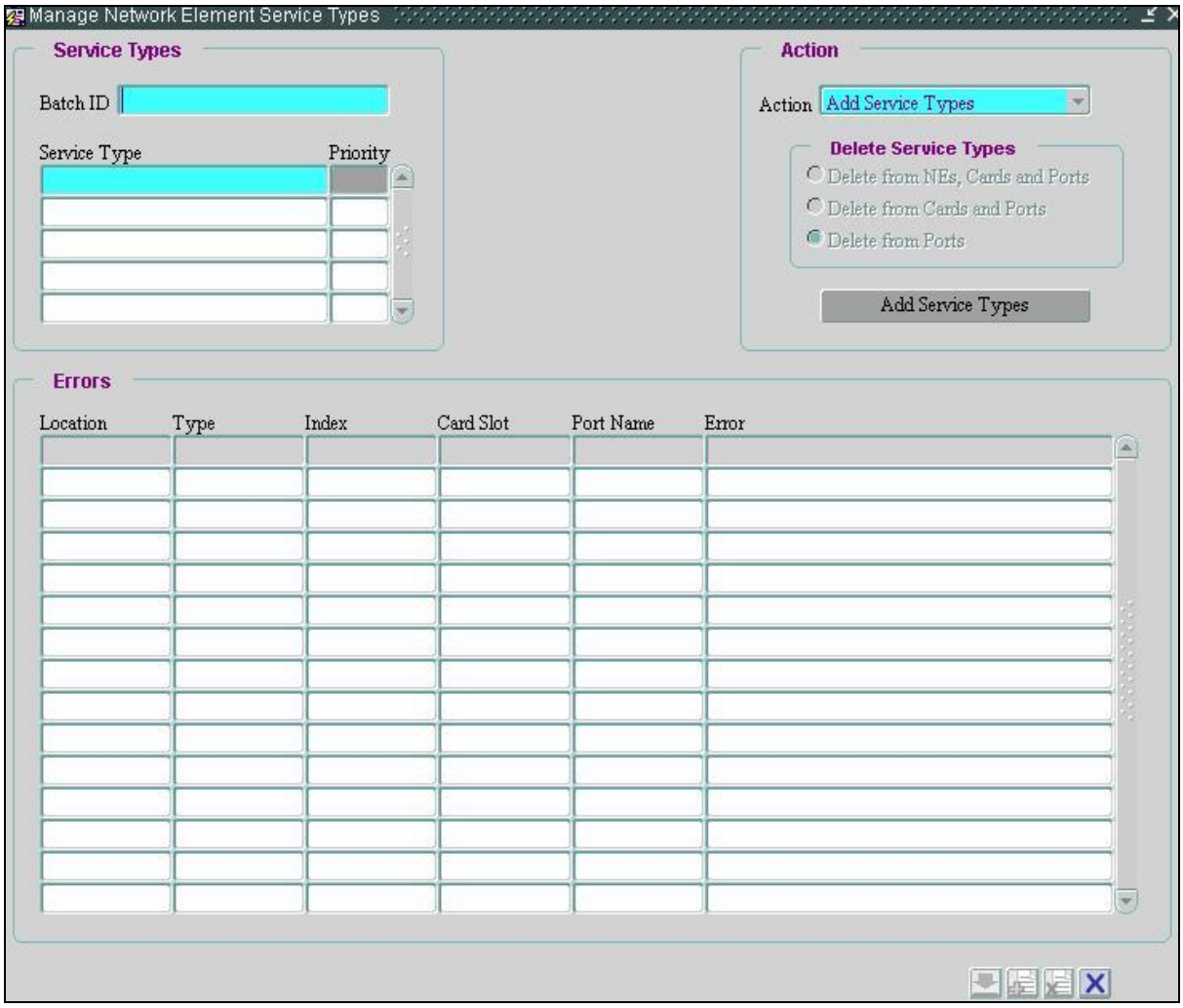

Figure 14: Manage Network Element Service Types

9. Enter a unique batch ID in the **Batch ID** field in the Service Types section.

10. Use LOV to enter all the valid service types that are to be added, deleted or updated in the **Service Type** field.

11. Enter the priority across each service type in the **Priority** field.

    Note: This is an optional field.

12. Select the action type in the **Action** section. It is set to Add Service Types by default.

Note: If you select either Delete Service Types or Update Service Types, the **Delete Service Types** sub section is enabled and you can further choose the deletion criteria from the given options. The default option is set to **Delete from Ports**.

13. Click **Add Service Types/ Delete Service Types/ Update Service Types.** A message appears asking you to confirm the changes.
14. Click **Yes** to save the changes. Another message appears saying that the changes have been successfully saved.
15. Click **OK**. The changes are saved to the database.

    Note: The **Errors** section is populated if any errors occur while adding/ deleting/ updating service types.

3.7.2 Frame Service Types

Frame Service Types is used to add, modify or delete service types that are related to the frame found by the search criteria.

To navigate to Frame Service Types:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears.
2. Select **Components ➔ Manage Service Types ➔ Frame Service Types.** The Frame Service Types tab highlighted in the Manage Service Types screen.

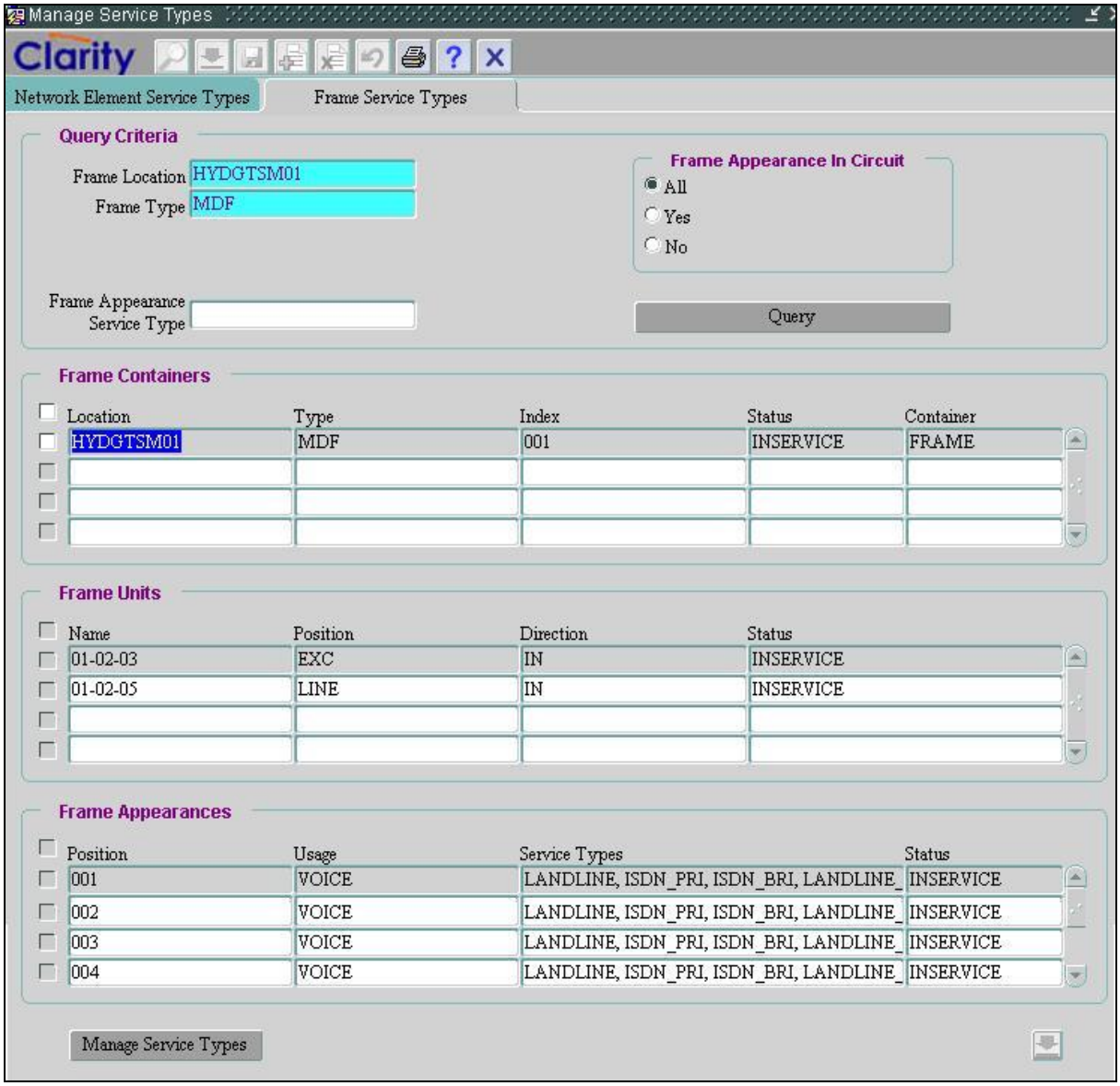

Figure 15: Frame Service Types

Field References

The field names and description of all the fields that appear in the Frame Service Types tab are given below:

Table 12: Field References for Frame Service Types

Field Name	Field Description
Query Criteria	
Frame Location	This is a mandatory field where the physical location of the frame has to be entered. Use LOV to select a value
Frame Type	This is a mandatory field where a valid abbreviation for the frame type has to be entered. Use LOV to select a value
Frame Appearance	This is an optional field where a service type can be entered to filter the query

Field Name	Field Description
Service Type	
Query	Click this button to find the frame based on the details entered in the query criteria
Frame Containers[#]	
Location	Physical location of the frame
Type	Valid abbreviation for the frame type
Index	Index number assigned to the frame
Status	Current status of the frame
Container	The frame container
Frame Units[#]	
Name	The index of the frame pin name
Position	The frame unit position. For example, EXC
Direction	The direction of the frame unit. For example, IN
Status	Current status of the unit. For example, INSERVICE
Frame Appearances[#]	
Position	The pin name after the index
Usage	The usage of the frame appearance. By default, it is set to VOICE
Service Types	The service types supported by the pins
Status	Current port status. For example, INSERVICE

	Click this button to navigate to the Manage Network Element Service Types screen	
	Service Types	
	Batch ID	This is a mandatory field. Enter alpha-numeric unique code
	Service Type	This is a mandatory field for a valid service type. Use LOV to select a value
	Priority	The new priority for the service type
	Action	
	Action	This field contains a dropdown list to select the relevant action

Field Name	Field Description	
Manage Service Types		to be performed
	Add Service Types	Click this button to add service types
	Errors[#]	
	Location	Physical location of the frame
	Type	Valid abbreviation for the frame type
	Index	Index number assigned to the frame
	Frame Unit Name	The name of the frame unit
	Frame Unit Position	The frame unit position of the network element/frame
	Frame App'nce Position	The name of the frame appearance that has not changed
	Error	The reason for the error

All the fields in the section marked with [#] are non-editable and auto-populated.

Managing Service Types for a Frame

This section is used to add, modify or delete service types for a frame record.

To manage service types of a frame record:

1. Navigate to the **Manage Service Types** screen.
2. Click **Frame Service Types** tab. The Frame Service Types screen appears.
3. Enter the valid Frame location and Frame type using the respective LOVs in the **Query Criteria** section.
4. Enter the service type in the **Frame Appearance Service Type** field.

   Note: This is an optional field.
5. Click **Query.** The Frame Containers section, Frame Units section and Frame Appearances section are populated and the Manage Service Types button is enabled.

   Note: If the query criteria are invalid, a message appears, "*No records were retrieved for this query"*.
6. Select the relevant option in the **Frame Appearance In Circuit** section. This helps in filtering the frame appearances based on whether they are attached to the circuit (Yes) or not (No). 'All' is selected by default.
7. Select the appropriate section for which you want to manage service types.

   Note: Selecting the Frame Containers section enables the Frame Units section. Selecting Frame Units enables the Frame Appearances section.

8. Click **Manage Service Types**. A message appears if no checkbox is selected, asking if you wish to apply the service type action to all existing frame appearances on each of the retrieved frame containers/ frame units.
9. Click **No** to select the relevant section in the Frame Service Types screen.

   Or

   Click **Yes** to continue. The Manage Frame Service Types screen appears.

   Note: A message appears when you click 'No', asking you to select one or more frame containers. Click **OK** to continue and select the relevant section. Then, repeat step 8.

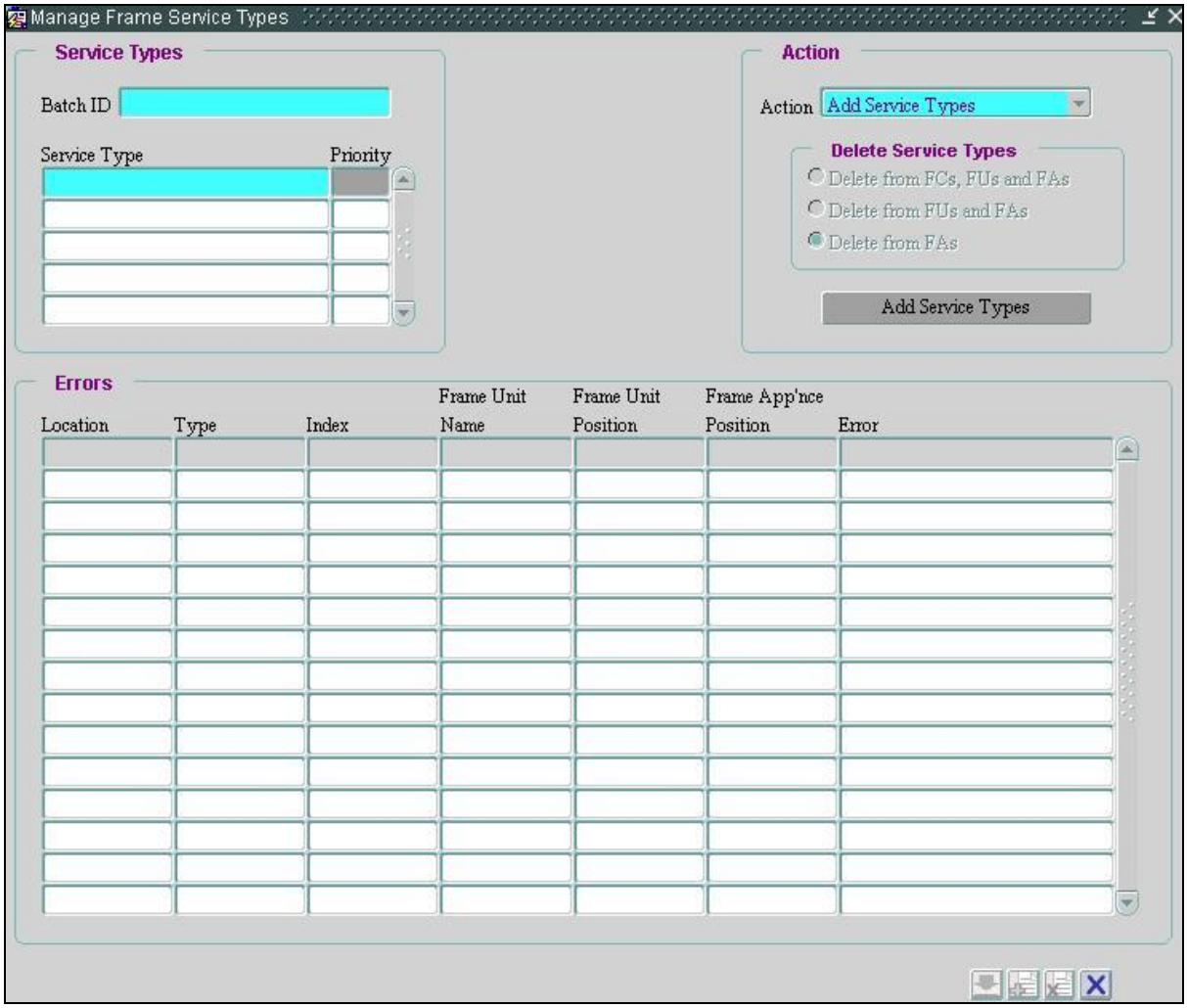

Figure 16: Manage Frame Service Types

10. Enter a unique batch ID in the **Batch ID** field in the Service Types section.
11. Use LOV to enter all the valid service types that are to be added, deleted or updated in the **Service Type** field.
12. Enter the priority across each service type in the **Priority** field.

    Note: This is an optional field.
13. Select the action type in the **Action** section. It is set to Add Service Types by default.

    Note: If you select either Delete Service Types or Update Service Types, the **Delete Service Types** sub section is enabled where you can further select the deletion criteria from the given options. The default option is set to Delete from Ports.

14. Click **Add Service Types/ Delete Service Types/ Update Service Types.** A message appears asking you to confirm the changes.
15. Click **Yes** to save the changes. Another message appears saying that the changes have been successfully saved.
16. Click **OK**. The changes are saved to the database.

    Note: The **Errors** section is populated if any errors occur while adding/ deleting/ updating service types.

3.8 Number Creation

The Number Creation screen is used to create voice number ranges for specific service types. It is also used to set the created range to Available status or delete the range just created.

Tasks that are performed using this screen include:

- Generating a number range
- Setting number status to Available
- Deleting a number range

To navigate to the Number Creation screen:

1. Click **Inventory** on the Clarity home page. A dropdown list appears.
2. Select **Numbers ➔ Voice Numbers ➔ Create**. The Number Creation screen appears.

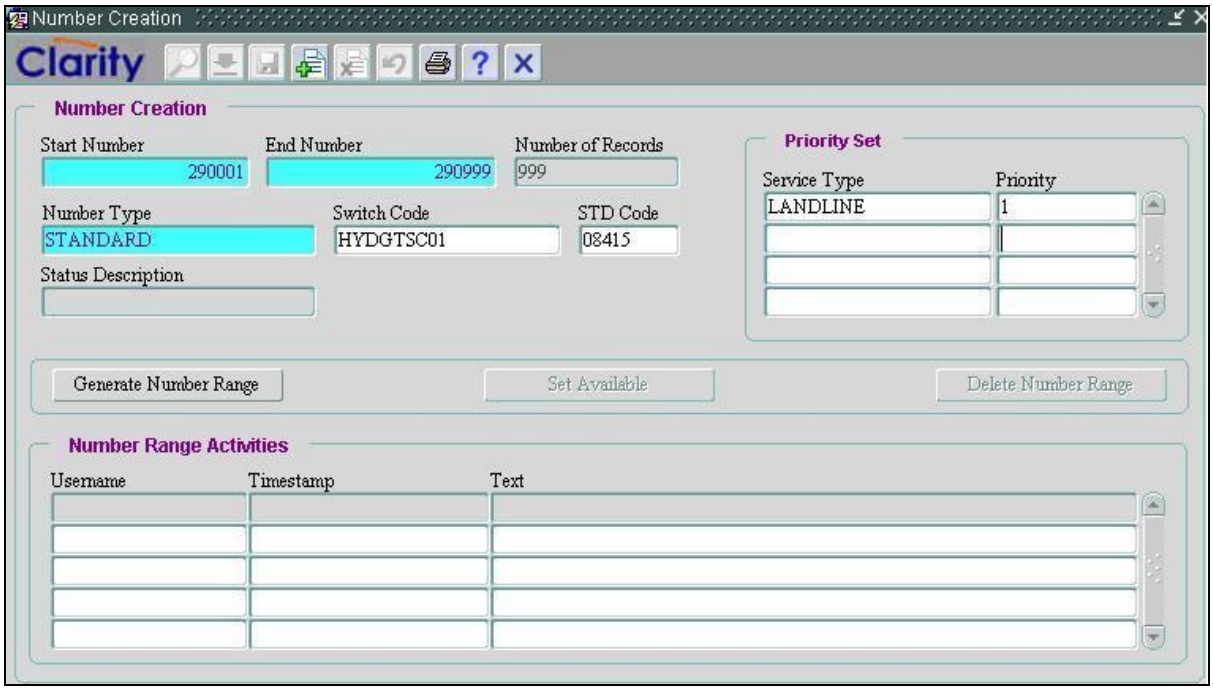

Figure 17: Number Creation

Field References

The field names and description of all the fields that appear in the Number Creation screen are given below:

Table 13: Field References for Number Creation

Field Name	Field Description
Number Creation	
Start Number	This is a mandatory, numeric field that contains the first number in the number range
End Number	This is a mandatory, numeric field that contains the last number in the number range
Number of Records	This non-editable field displays the count of the proposed number range, including the start and end numbers
Number Type	This is a mandatory field. Select 'STANDARD' that is set as default
Switch Code	This field allows an area code to be associated with a number. Use LOV to select a value
STD Code	This field allows an STD code to be associated with a number. Use LOV to select a value
Status Description	This field is automatically populated with the status **Not Conditioned** when the number range is generated
Generate Number Range	Click this button to generate the specified number range
Set Available#	Click this button to set the status of the generated numbers to Available
Delete Number Range#	Click this button to delete a number range **Note:** Deletion of numbers in the number range is possible only if all the numbers are not used, that is, the number status is Available or Not Conditioned.
Priority Set	
Service Type	The service type for the new numbers. Use LOV to select a value
Priority	The priority of the service type. It is a numeric field and accepts values from 1-99
Number Range Activities##	
Username	The name of the user who has worked on the number ranges
Timestamp	The date that the number ranges were worked on
Text	Any additional comments about the number range generated by the system

Buttons marked with # are enabled only when a number range is generated.

All fields marked with ## are auto-populated and non-editable.

3.8.1 Generating a Number Range

This section describes how to generate a number range.

Note: A number range must be associated with a specific service type.

To generate a number range:

1. Navigate to the **Number Creation** screen.
2. Enter the starting number in the **Start Number** field. For example, 2231000.
3. Enter the last number of the number range in the **End Number** field. For example, 2231999. The **Number of Records** field displays the count of numbers to be generated in this number range, that is, 1000.

   Note: To generate only one number, type the same number in the Start Number and End Number fields. The Number of Records field displays one record.
4. Select the number type that you are assigning the set of numbers to, using the LOV in the **Number Type** field. For example, STANDARD.
5. Enter the codes for the range of numbers in the **Switch Code** and **STD Code** fields, using the LOV.
6. Select the **Service Type** using the LOV. For example, LANDLINE.
7. Enter a priority for each service type associated with this number range in the **Priority** field. For example, 1.

   Note: You can create a Priority Set by adding more service types and entering any value for the priority of each service type. The service types WLL and PCO must have separate number ranges. The number ranges that are associated with LANDLINE must also be associated with ISDN_BRI, ISDN_PRI and PCO.
8. Click **Generate Number Range**. A message appears, asking you to confirm that you want to generate this number range.
9. Click **Yes**. Another message appears, *"Number range created successfully".*

   Note: If the number range or numbers within the range are already generated, an error message appears.
10. Click **OK**. The Clarity system generates the number range.

    Note: This may take several moments, depending on the count of numbers to be generated.
11. Click **OK**. The number range record is automatically saved. The number status description is set to Not Conditioned and the Number Range Activities fields are updated.

3.8.2 Setting Number Status to Available

Prerequisites to proceed: A number range has to be generated, with the numbers reflecting a Not Conditioned status. This task has to be performed in continuation to the generation of a number range.

To set the status of a number range to Available:

1. Perform steps 1-11 of Generating a Number Range.
2. Click **Set Available**. A message appears, "*Are you sure you want to update the status to AVAILABLE?"*
3. Click **Yes**. A message appears, "*Numbers updated successfully"*.
4. Click **OK**. The Clarity system sets the status of each number in the range to Available.

   Note: The number range record is automatically saved and the Number Range Activities fields are updated.

3.8.3 Deleting a Number Range

Prerequisites to proceed: A number range has to be generated, with the numbers reflecting an Available or Not Conditioned status. If one or more numbers in the number range have another status value, such as Allocated, the number range cannot be deleted.

This section describes how to delete the numbers specified in a number range record that has just been created. Once the screen is closed, the number range has to be deleted using the Number Manager screen.

To delete a number range:

1. Perform steps 1-11 of Generating a Number Range.

   Or

   Perform steps 1-4 of Setting Number Status to Available.
2. Click **Delete Number Range**. A message appears, asking if you want to delete all the numbers in the range.
3. Click **Yes**. A message appears, "*Numbers deleted successfully"*.
4. Click **OK**. The Clarity system deletes the number range record. The Number Range Activities fields are auto-populated.

3.9 Number Manager

The Number Manager screen is used to search for numbers and change the details associated with a voice number record. It can also be used to delete number ranges.

The Number Manager screen contains three sub-screens – Number Management Search, Batch Update and Advanced Batch Update.

Tasks that can be performed using the Number Manager screen are:

- Querying numbers
- Batch updating numbers
- Batch deleting number ranges

To navigate to the Number Manager screen:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears.
2. Select **Numbers ➔ Voice Numbers ➔ Manage.** The **Number Manager** screen appears, with the Number Management Search tab highlighted as the default one.

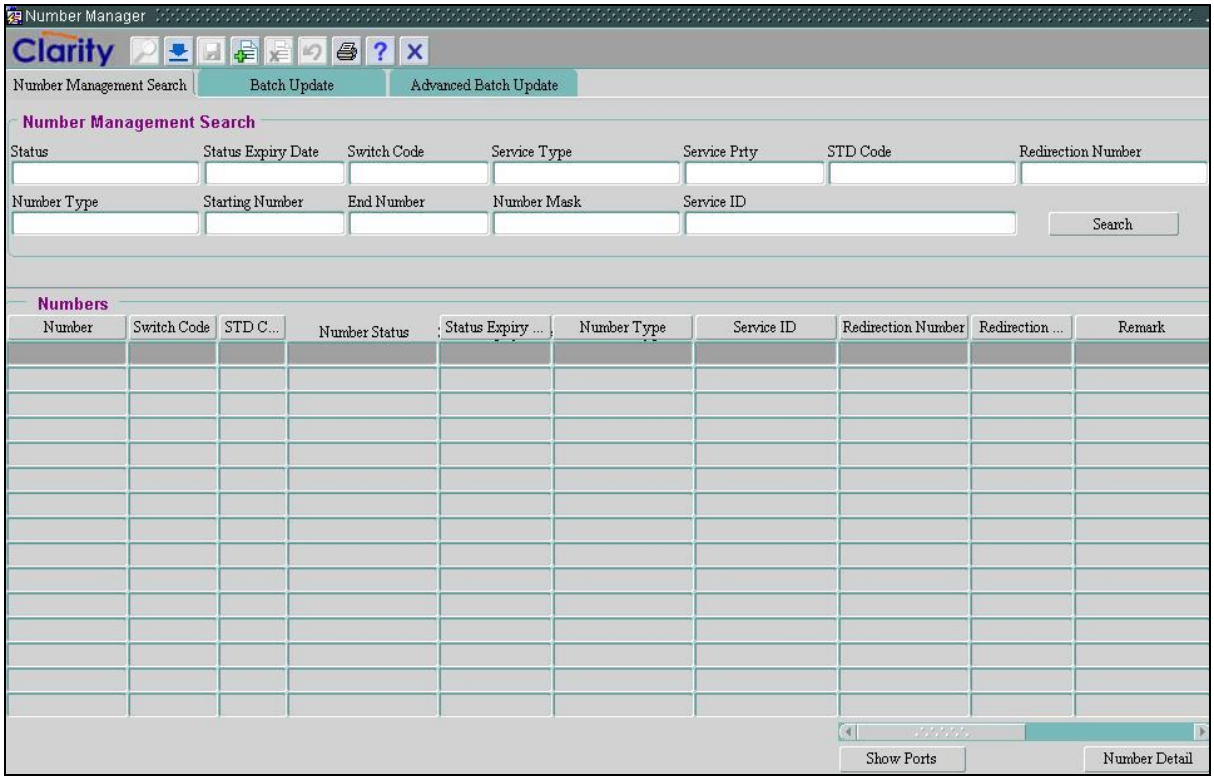

Figure 18: Number Manager

3.9.1 Number Management Search

Number Management Search is used to locate the details of a specific number based on different search criteria like Status, Area Code and STD Code.

To navigate to Number Management Search:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears.
2. Select **Numbers ➔ Voice Numbers ➔ Manage.** The Number Management Search tab appears, with the Number Management Search tab highlighted as the default one.

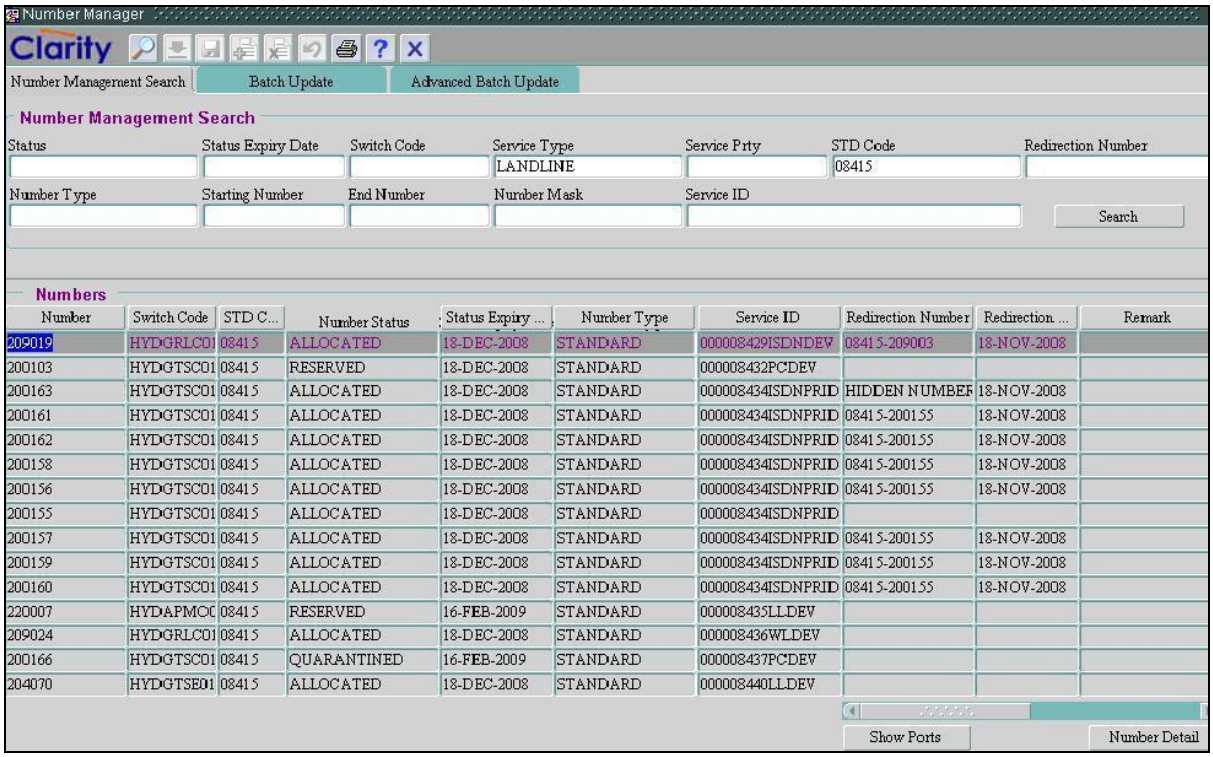

Figure 19: Number Management Search

Field References

The field names and description of all the fields that appear in the Number Management Search tab are given below:

Table 14: Field References for Number Management Search

Field Name	Field Description
Number Management Search	
Status	The status of the number, for example: Available, Reserved. Use LOV to select a value
Status Expiry Date	The date on which the status of the number will be set back to Available
Switch Code	The Switch Code associated with the number. Use LOV to select a value
Service Type	The Service Type associated with the number. For example, LANDLINE. Use LOV to select a value
Service Prty	The Service Priority associated with the Service Type
STD Code	An STD code associated with the numbers. Use LOV to select a value
Redirection Number	This is a numeric field for the pilot number used in ISDN (BRI and PRI) services
Number Type	A unique code that identifies a particular Number Type. For example, STANDARD. Use LOV to select a value
Starting Number	The first number in the number range

Field Name	Field Description
End Number	The last number in the number range
Number Mask#	-
Service ID	The Service Identifier that is associated with a number
Search	Click this button to start the search
Numbers##	
Number	This number is stored in the Number table and cannot be updated
Switch Code	The Switch Code associated with the number
STD Code	The STD Code associated with the number
Number Status	Actual status associated with the number
Status Expiry Date	The date when the number status is changed back to Available. This field is empty when the status is set to Available, Not Conditioned or Allocated
Number Type	Number Type of the number. For example, STANDARD
Service ID	The Service Identifier that is associated with the number
Redirection Number	This is a numeric field for the pilot number used in ISDN (BRI and PRI) services
Redirection Date#	-
Remark#	-
Customer Abbreviation	The name of the customer who is linked with the number
Account Number	The account number associated with the customer.
Show Ports#	-
Number Detail	Click this button to view details of the selected number in the **Numbers Detail** screen. This is a non-editable screen

Fields/ buttons marked with # are not used.

All fields in the section marked with ## are auto-populated and non-editable.

Note: The **Numbers** section of every tab is common for Number Management Search, Batch Update and Advanced Batch Update.

Querying Numbers

This section describes how to query a number record.

To query a number record:

1. Navigate to the **Number Manager** screen.
2. Enter the values you want to query in the **Number Management Search** section.

   Note: The values are entered in the fields, depending on the search criteria.
3. Click **Search**. The records matching your query appear in the Numbers section of the Number Manager screen.

3.9.2 Batch Update

The Batch Update tab is used to change all the numbers that are displayed in the Numbers section after querying in the Number Management Search tab. Only one batch change can be performed with each click of the **Batch Update**.

To navigate to Batch Update:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears
2. Select **Numbers ➔ Voice Numbers ➔ Manage.** The Number Manager screen appears.
3. Click **Batch Update**. The Batch Update tab is highlighted.

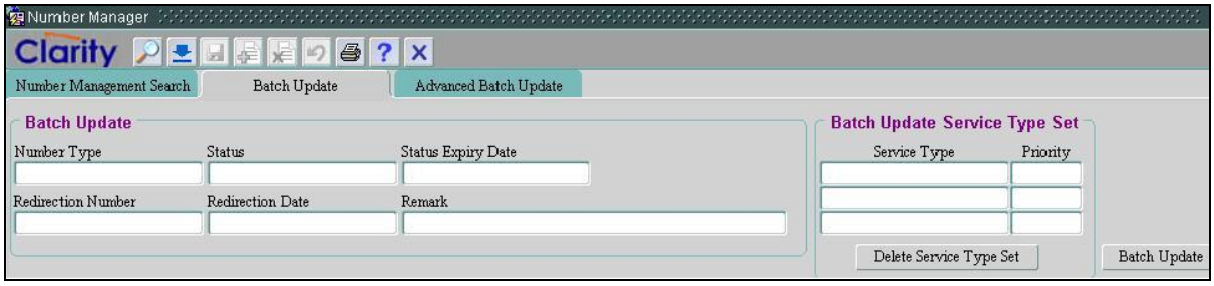

Figure 20: Batch Update

Field References

The field name and description of all the fields that appear in the Batch Update tab are given below:

Table 15: Field References for Batch Update

Field Name	Field Description
Batch Update	
Number Type	The new Number Type for numbers that are retrieved matching a query in the Number Management Search tab. Use LOV to select a value
Status	The new status for the numbers displayed by the query. Use LOV to select a value
Status Expiry Date	The new date when the status of the numbers is changed back to Available
Redirection Number	This is a numeric field for the pilot number used in ISDN (BRI and PRI) services
Redirection Date#	-
Remark#	-

Field Name	Field Description
Batch Update Service Type Set	
Service Type	The new Service Type for numbers displayed by the query. Use LOV to select a value
Priority	The new Priority of Service Types associated with the numbers displayed by the query
Delete Service Type Set	Click this button to delete the specified Service Type Set for Available and Not Conditioned numbers returned from a query in the Number Management Search tab
Batch Update	Click this button to update all the numbers returned from a query in the Number Management Search tab. Only one batch update, for example: number type changes, can be made with each click of this button
Numbers[#]	

[#]For details, see Field References for Number Management Search.

Batch Updating Numbers

Prerequisites to proceed: The numbers that are to be updated need to be queried using the Number Management Search tab, before batch updating the numbers.

This section explains how to update numbers displayed in the Numbers section of the Number Manager screen, which are found by querying in the Number Management Search tab.

To batch update the numbers:

1. Navigate to the **Number Manager** screen.
2. Query the number records you want to update in the Number Management Search tab.

   Note: For details, see Querying Numbers.
3. Click **Batch Update** in the Number Manager screen.

   Note: If you wish to update the area code, STD code or prefix of the queried numbers, click **Advanced Batch Update**.
4. Enter the value in the field that has to be updated. For example, a new status entered in the Status field.

   Note: Only one field can be batch updated at a time.
5. Click **Batch Update**. A message appears.
6. Click **Yes** to confirm the update. The numbers are updated and a report summary of the number of records changed or not appears.
7. Click **OK** to close the report.

   Note: To batch update another field, re-query the numbers in the Number Management Search tab and repeat steps 3-7.

3.9.3 Advanced Batch Update

The Advanced Batch Update tab is used to change the area code, STD code or prefix of all the numbers that appear in the Numbers section, on querying in the Number Management Search tab. This tab is also used to delete the displayed number range.

To navigate to Advanced Batch Update:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears.
2. Select **Numbers ➔ Voice Numbers ➔ Manage.** The Number Manager screen appears.
3. Click **Advanced Batch Update**. The Advanced Batch Update tab is highlighted.

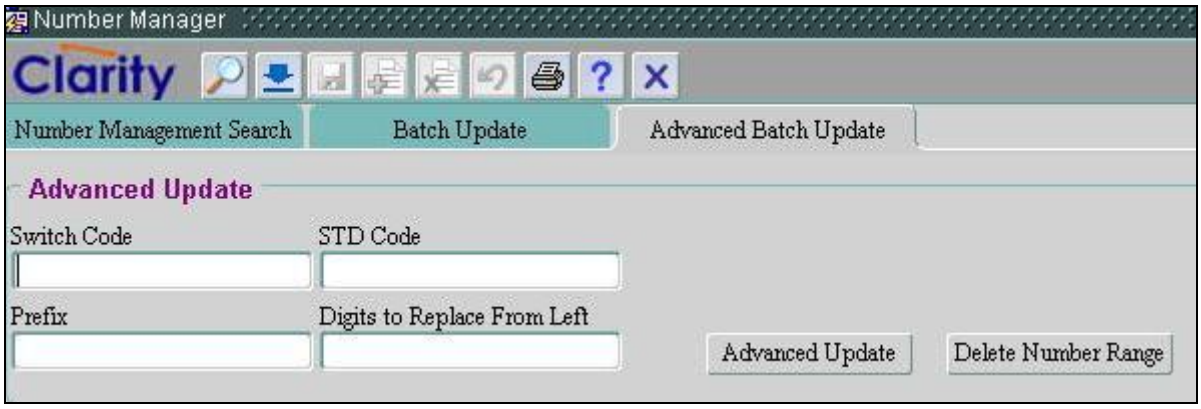

Figure 21: Advance Batch Update

Field References

The field names and description of all the fields that appear in the Advance Batch Update tab are given below:

Table 16: Field References for Advanced Batch Update

Field Name	Field Description
Switch Code	The new Area Code for numbers returned from a query in the Number Management Search tab. Use LOV to select a value
STD Code	The new STD Code for numbers displayed by the query. Use LOV to select a value
Prefix	The new Prefix for numbers displayed by the query
Digits to Replace from Left	The number of digits to be replaced starting from the left, for example: 3 replaces only the first three digits of the numbers displayed after querying in the Number Management Search tab
Advanced Update	Click this button to update all the numbers returned from a query in the Number Management Search tab. Only one batch update, for example: area code changes, can be made with each click of this button
Delete Number Range	Click this button to delete all the numbers returned from a query in the Number Management Search tab

Batch Deleting Number Ranges

Prerequisites to proceed: The numbers that are to be deleted need to be queried using Number Management Search tab before batch deleting the numbers.

This section describes how to delete numbers that appear in the Numbers section of the Number Manager screen. These numbers are found by querying in the Number Management Search tab.

Note: A number range can be deleted only when all numbers within the number range have a status of either Available or Not Conditioned. If one or more numbers in the number range have another status value, such as Allocated, the number range cannot be deleted.

To delete a number range:

1. Navigate to the **Number Manager** screen.
2. Query the number records you want to delete in the Number Management Search tab.

   Note: For details, see Querying Numbers.
3. Click **Advanced Batch Update**. The Advanced Batch Update tab is highlighted.
4. Click **Delete Number Range**.
5. Click **Yes** to confirm the number range deletion. All the queried numbers are deleted.
6. Click **OK** to close the deletion report. The changes are saved to the database.

3.9.4 Numbers Detail

This screen is used to view details of the number that is highlighted in the Numbers section of the Number Manager screen.

Note: You cannot use the Insert and Delete icons in this screen.

To navigate to the Numbers Detail screen:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears.
2. Select **Numbers ➔ Voice Numbers ➔ Manage**. The Number Manager screen appears.
3. Click **Number Detail**. The Numbers Detail screen appears.

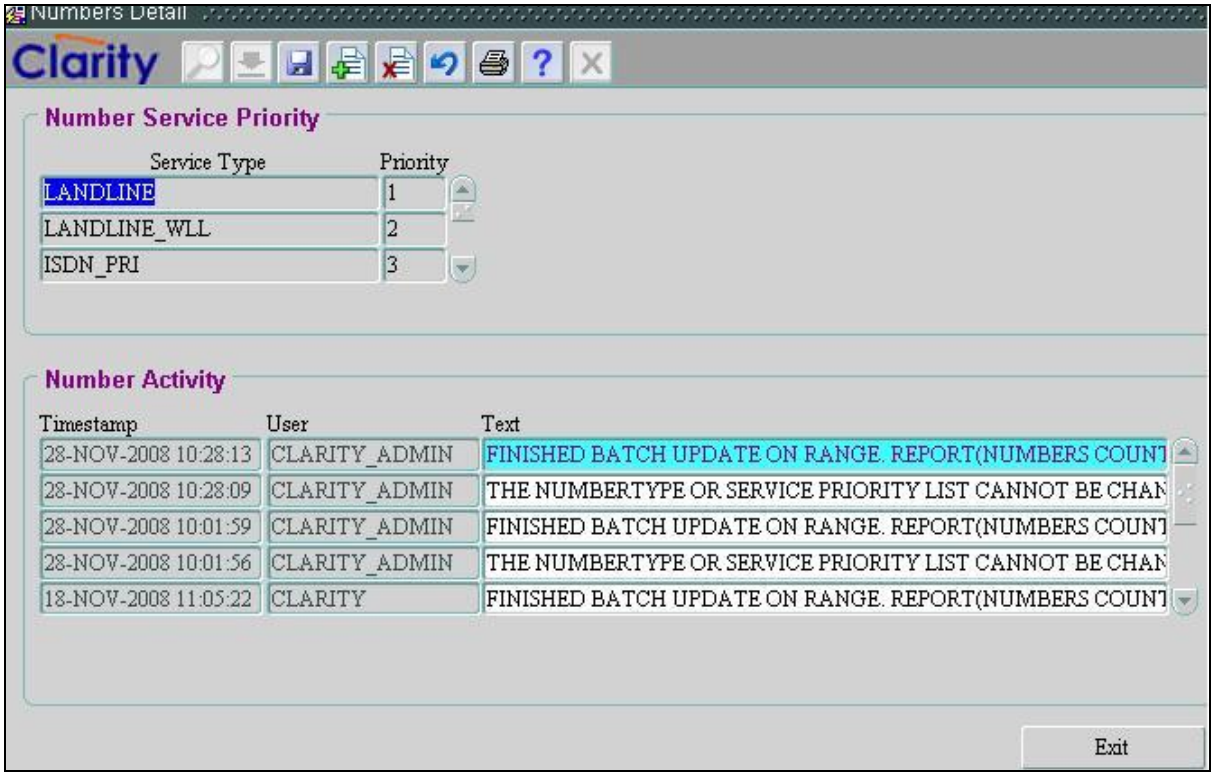

Figure 22: Numbers Detail

Field References

The field names and description of all the fields that appear in the Numbers Detail screen are given below:

Table 17: Field References for Numbers Detail

Field Name	Field Description
Number Service Priority	
Service Type	The Service Type associated with the number. For example, LANDLINE
Service Type Priority	This is the priority given for the Service Type associated with the number
Number Activity	
Timestamp	The date and time that the number was updated. The format is **dd-mm-yyyy** and **hh:mm:ss**
User	The user who updated the number
Text	This is an auto-populated text field that displays all the activities that are associated with the number

3.10 Circuit Design

Circuits are used to define end-to-end connections for a customer against a service. End-to-end connections include ports of Network Elements, and the pins of MDF, Pillar and DP.

This section contains information about circuits on the network. It is used to view and maintain circuit details.This screen is used to create, modify and delete circuit records.

Tasks that can be performed using this screen are:

- Creating circuit records
- Querying circuit details
- Opening the Network Elements screen
- Modifying circuit records
- Copying circuit records
- Copying circuit cross connections
- Deleting circuit records

Note: The creating circuit records task is only performed for creating cross connections and alternate name records.

To navigate to the Circuit Design screen:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears.
2. Select **Circuits ➔ Circuit Design**. The Circuit Design screen appears.

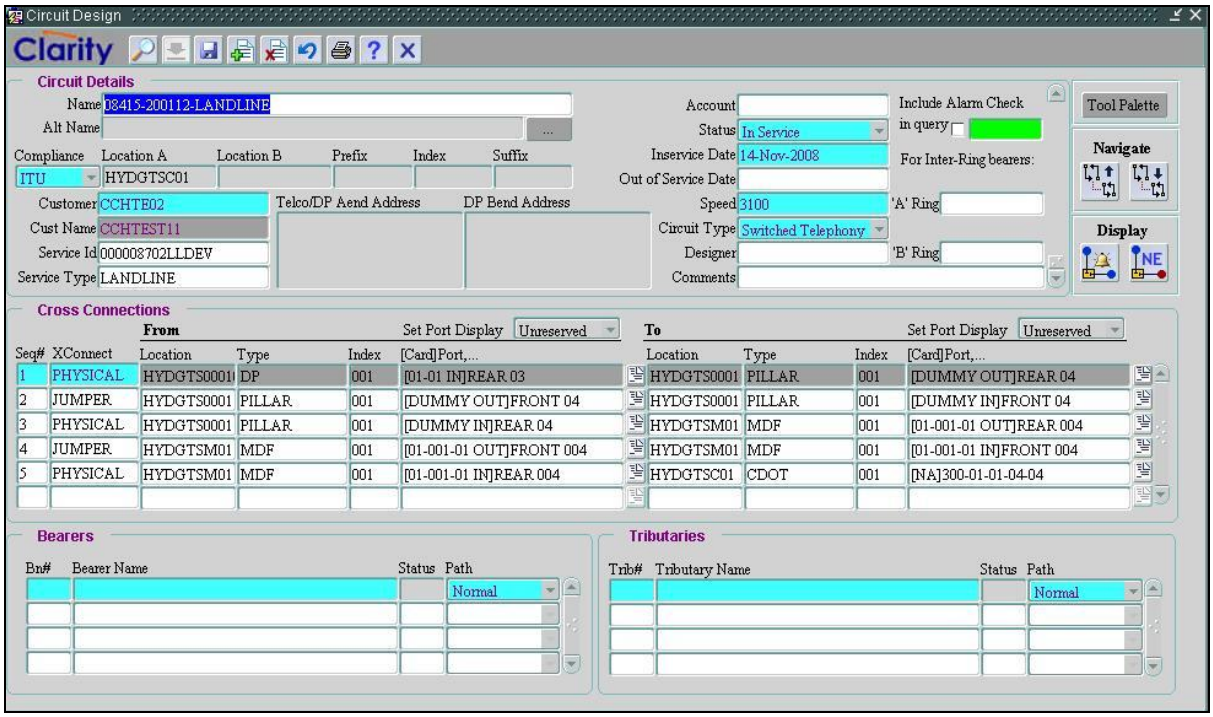

Figure 23: Circuit Design

Field References

The field names and description of all the fields that appear in the Circuit Design screen are given below:

Note: The **Bearers and Tributaries** sections are not used.

Table 18: Field References for Circuit Design

Field Name	Field Description
Circuit Details	
Name	The unique circuit name that has been created and saved in the database. This field is used to query a circuit in the database **Note:** This name cannot be created manually. The naming convention followed for this is: STD Code + - + Telephone number + - + Service type. For example, 08415-200112-LANDLINE.
Alt Name	This is a non-editable, auto-populated field to view the alternative name of the circuit
Compliance	This is a dropdown list used to select the compliance standard for the circuit name. For example, ANSI, ITU and NONE. The default value is 'ITU'
Location A	This is a mandatory field. Use LOV to select the A end location name
Location B	This is a mandatory field. Use LOV to select the B end location name
Prefix	This is a mandatory alpha-numeric field for the prefix for the the circuit name. This prefix is often used to identify the speed of the circuit
Index	This is a non-editable, auto-populated field with a sequence number of the circuit
Suffix	This is a non-editable, alpha-numeric field to give a suffix to the circuit name
Customer	This is a mandatory field. Use LOV to select the name of the customer who owns or leases the circuit. Customer records are set up in the Customer Accounts screen. The default value is 'BSNL'
Cust Name	This is a non-editable, auto-populated field to specify the customer name
Service Id	This is a non-editable, auto-populated field to specify the Service Id
Service Type	This is a non-editable, auto-populated field to specify Service Type
Telco/DP Aend Address	This is a non-editable, auto-populated field to specify the location address of the starting point of the service. For point to point services, this is the customer's A-end location address. For non-data services, this is the switch location code address, indicating the point of service origin
DP Bend Address	This is a non-editable, auto-populated field to specify the location address of the terminating point of the service, indicating the point of service termination on the Telco equipment
Account#	-

Field Name	Field Description	
Status	This is an editable, dropdown list to select the current status of the circuit. For example, Commissioned, Proposed and In Service	
Inservice Date	This is an editable, auto-populated date field to specify the circuit creation date. The format used is DD-MMM-YYYY	
Out of Service Date	This is an editable, date field to specify the date the circuit becomes out-of-service. The format used is DD-MMM-YYYY	
Speed	This is a mandatory field, which is populated using an LOV for the guaranteed speed of operation for this services	
Circuit Type	This is a dropdown list to select the type of the circuit. For example, Switched Telephony, Leased,Trunk and Bearer. This information is set up in the **Check Constraints** screen. The default value is 'Switched Telephony'	
Designer	This is a non-editable, auto-populated field to specify the person who designed (created) the circuit including the network element interconnections	
Comments	This is an editable, alpha-numeric field to specify the comments. Press **Ctrl+E** to display the Editor screen. In the Editor screen you can view, enter, delete or modify text	
Include Alarm Check in query#	This is a checkbox used to select alarms as part of a query	
For Inter-Ring bearers: 'A' Ring#	-	
For Inter Ring bearers: 'B' Ring#	-	
Tool Palette	This button is activated only when information is entered in the Circuit Details section. Clicking this button gives a dropdown menu **Note:** Only the Alternate Names, Change Name, Copy Circuit, Copy Xconnection and View Reservation Details options need are used in this menu.	
	Alternate Names	Click this button to open the **Alternate Circuit Names** screen. Use this screen to add, modify or delete alternative names for the selected circuit
	Change Name	Click this button to open the **Circuit Name Change** screen. This option is unavailable for circuits that have been created via a service order. Click here for more information

Field Name	Field Description	
	Copy Circuit	Click this button to open the **Copy Circuit** screen. Use this screen to copy the details of an existing circuit record to help in creating a new circuit record
	Copy Xconnections	Click this button to open the **Copy Cross Connections** screen. Use this screen to copy the cross connection definitions of an existing circuit record to the current circuit record
	View Reservation Details	Click this button to open the **Circuit Expiry Date** screen. Use this screen to the view and modify the Expiry Date and Notify date for the proposed circuit
Navigate#	-	
Display	Click  # to display the **Circuit Affecting Alarms** screen in context sensitive mode for the selected circuit. Click  to display the Network Elements screen in context sensitive mode for the selected circuit	
Cross Connections		
Seq#	It is a mandatory field to specify the order number for the cross connection appearance in the screen	
XConnect	This is a mandatory field to describe the type of cross connection. Use LOV to select a cross connect. For example, Physical or Jumper	
(From) Location	Use LOV to select the the location of network element.Double clicking this field opens either the **Network Elements** screen or the **Frames** screen, depending on the record selected in the **Type** field	
(From) Type	Use LOV to select the the type of network element	
(From) Index	Use LOV to select the the Instance of network element	
(From) [Card] Port,…	Use LOV to select the terminating port name of the network element (one or more) and the slot where the card is located.Double click this field to open the Port Name screen. Use this screen to view the full port name in instances where the port name is larger than the field width.	
(From) Set Port Display#	-	
(To) Location	Use LOV to select the location of network element or frame.Double clicking this field opens either the **Network Elements** screen or the **Frames** screen,	

Field Name	Field Description
	depending upon the record selected in the **Type** field
(To) Type	Use LOV to select the type of network element
(To) Index	Use LOV to select the the Instance of network element.
(To) [Card] Port,…	Use LOV to select the terminating port name of the network element (one or more) and the slot where the card is located.Double click this field to open the **Port Name** screen. Use this screen to view the full port name in instances where the port name is larger than the field width
(To) Set Port Display#	-
	Click this button to display the **Port Parameters** screen. Use this screen to add or load port parameters to the selected network elements

Fields/ buttons marked with # are not used.

3.10.1 Creating Circuit Records

The following records can be created using the Circuit Design screen:

- Circuit details
- Alternate names (other names)
- Cross connections

Note: This task is performed only for creating **cross connections** and **alternate name** records.

Creating Circuit Detail Records

A circuit detail record consists of the fields in the Circuit Detail section of the Circuit Design screen.

Note: The **Circuit details** section is usually not created manually.

To create a Circuit Detail record:

1. Navigate to the **Circuit Design** screen.
2. Select a value for the **Compliance** field from the dropdown list.
3. Use LOV to select an A end location in the **Location A** field for the circuit.
4. Use LOV to enter a B end location in the **Location B** field for the circuit.
5. Enter information in the **Prefix** and **Suffix** fields.
6. Click anywhere on the screen. A unique circuit sequence number is generated and appears in the **Index** field.
7. Enter details in the remaining mandatory fields and click **Save**. A message appears, "*Your changes have been successfully saved*".

8. Click **OK.** The changes are saved in the screen.

   Note:

   i. In the Compliance field, the ANSI option is not required.

   ii. The LOV button is highlighted for those fields that allow values to be selected.

Creating Alternate Name Records

An alternate name can be created for a group of circuits that are grouped based on certain criteria. Searching in the Circuit Query screen using this alternate name displays details of all the circuits in the group. An alternate name can also be used for a single circuit.

To create an Alternate Name record:

1. Navigate to the **Circuit Design** screen.
2. Query the required circuit details. Matching results appear.

   3.10.2 Note: **For details, see Querying Circuit Details**

3. Click **Tool Palette ➔ Alternate Names**. The Alternate Circuit Names screen appears.
4. Enter an alternate circuit name in the **Name** field.
5. Use LOV to enter the type of the group in the **Type** field. For example, Customer or Other Carrier.
6. Click **Exit** to close the screen. The details are auto-populated in the Alt Name field.
7. Click **Save**. A message appears, "*Your changes have been successfully saved".*
8. Click **OK**. The alternate name for the circuit is saved in the database.

   Note: Alternate names are unique in the context of the related circuit. In contrast, circuit names are unique across the system.

Creating Cross Connection Records

This section describes how to add ports that have been commissioned or placed **Inservice,** to an existing circuit.

To create a cross connection record:

1. Navigate to the **Circuit Design** screen.
2. Query the required Circuit details. Matching results appear.

   3.10.3 Note: **For details, see Querying Circuit Details**

3. Enter information in all the fields in the **Cross Connections** section.

Note:

i. Cross connections are formed starting from DP pin till Network Element port. For example, insert DP pin with sequence no. 10, Pillar In/Out pins with sequence no. 20, MDF line side pin with sequence no. 30 and NE port with sequence no. 40 for LANDLINE, ISDN and PCO Services, for WLL service only NE and MDF pin details are inserted.

ii. Rear pins should not be included in this section.

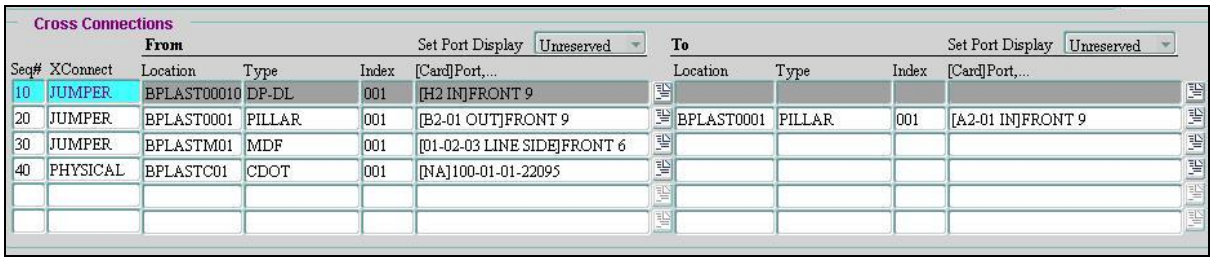

Figure 24: Cross Connections

4. Click **Save**. A message appears, *"Your changes have been successfully saved"*.
5. Click **OK**. The changes are saved in the database.

Note:

i. The Circuit Design screen opens in insert mode. However, if there is no empty space in a section that requires additional records, click **Insert** to create the extra space in this section.

ii. The status of this new circuit cannot be changed to Inservice or Commissioned.

3.10.4 Querying Circuit Details

To query circuit details:

1. Navigate to the **Circuit Design** screen.
2. Click **Query**. The screen enters query mode.
3. Enter the search criteria in the relevant field in the **Circuit Details** section.
4. Click **Query** again. Matching records appear.

Note:

i. Any cross connections, bearers or tributaries are also shown in the corresponding sections of the screen.

ii. Select fields for queries that are unique for the circuit that you are looking for. For example, query using the Customer field to find all circuits for a customer within the network.

3.10.5 Opening the Network Elements Screen

Open the Network Elements screen to view network element details for a selected circuit.

To open the Network Elements screen:

1. Navigate to the **Circuit Design** screen.
2. Query the required Circuit details. Matching results appear.

   3.10.6 Note: **For details, see Querying Circuit Details**

   .
3. Click **Network Elements**. The Network Elements screen appears.

   Note: The Network Elements screen is non-editable and appears in the context of the current circuit. This means that all the elements this circuit passes through at its base level, appear in the Network Elements screen.

3.10.7 Modifying Circuit Records

The Circuit Design screen is used to modify:

- Circuit details
- Circuit names

You can also associate service attributes with circuits.

Modifying Circuit Details

To modify a circuit detail:

1. Navigate to the **Circuit Design** screen.
2. Query the required Circuit details. Matching results appear.

   3.10.8 Note: **For details, see Querying Circuit Details**

3. Place the cursor in the field you wish to modify and highlight the value or text that you want to change.

   Note: Circuit status in the Status field can be changed from:

- 'Proposed' to 'Reserved' status
- 'Reserved' to 'Pending Delete' status
- 'Reserved' to 'Commissioned' status
- 'Reserved' to 'In Service' status
- 'Commissioned' to 'Pending Delete' status
- 'Commissioned' to 'In Service' status
- 'In Service' to 'Cancelled' status

4. Enter the new information.

Note: LOV can be used to populate fields for which it is available.

5. Click **Save**. A message appears, "*Your changes have been successfully saved"*.
6. Click **OK**. The changes are saved to the database.

Note: Circuits that are created via a service order can only be modified via a service order.

Modifying Circuit Names

This section describes how to modify an existing circuit name in the Circuit Design screen.

To modify a circuit name:

1. Navigate to the **Circuit Design** screen.
2. Query the required Circuit details. Matching results appear.

3.10.9 Note: **For details, see Querying Circuit Details**

3. Click **Tool Palette ➔Change Name**. The Circuit Name Change screen appears.
4. Enter the new circuit name in **Location A** and **Location B**. The Index field is automatically populated.

Note: The values can be selected using the LOV.

5. Click **Change Name**. The Name field is automatically populated with the new name of the circuit.
6. Click **Save**. A message appears, **"***Your changes have been successfully saved"*.
7. Click **OK**. The changes are saved to the database.

3.10.10 Copying Circuit Records

A circuit record displayed in the Circuit Design screen can be copied.

To copy a circuit record:

1. Navigate to the **Circuit Design** screen.
2. Query the required Circuit details. Matching results appear.

3.10.11 Note: **For details, see Querying Circuit Details**

3. Click **Tool Palette ➔ Copy Circuit**. The Copy Circuit screen appears.
4. Enter the number of copies you want to create in the **No. of New Circuits** field.
8. Click **Copy**. The new circuits are created and the names of these new circuits appear in the New Circuits list.
9. Click **Save**. A message appears, "*Your changes have been successfully saved"*.

10. Click **OK**. The changes are saved to the database.

3.10.12 Copying Circuit Cross Connections

While creating or designing a circuit, you can copy the cross connection definitions from an existing circuit record to the current circuit.

Note: Cross connections can only be copied to a circuit with a Proposed status.

To copy a circuit cross connection:

1. Navigate to the **Circuit Design** screen.
2. Create a new circuit record, or query the circuit record to which you want to add the cross connections.

   Note: For details, see

   3.10.13 Creating Circuit Detail Records**, Querying Circuit Details**

3. Click **Tool Palette ➔ Copy Xconnections**. The Copy Cross Connections screen appears.
4. Use LOV in the **Circuit** field, to select the circuit name that contains the cross connections to be copied.
5. Click **Copy**. A message appears, "*Do you want to save the changes you have made?"*
6. Click **Yes.** A message appears, *"Your changes have been successfully saved".*
7. Click **OK.** A message appears, **"***Cross connections copied successfully. Please verify and save your changes".*
8. Click **OK.** The cross connection details are copied from the selected circuit to the current circuit.

3.10.14 Deleting Circuit Records

The following records can be deleted from the Circuit Design screen:

- Circuit details
- Cross connections
- Alternate names

Deleting Circuit Detail Records

To delete a circuit detail record:

1. Navigate to the **Circuit Design** screen.
2. Query the required Circuit details. Matching results appear.

3.10.15 Note: **For details, see Querying Circuit Details**

.

3. Select the details of the circuit detail record to be deleted in the **Name** field.
4. Click **Delete**. A message appears, asking if you wish to continue with the deletion.
5. Click **Yes** to confirm the deletion.
6. Click **Save**. A message appears, **"***Your changes have been successfully saved*".
7. Click **OK**. The record is deleted.

   Note: You cannot delete a circuit detail record if the circuit has been placed **InService** or has been created using a service order.

Deleting Cross Connection Records

To delete a Cross Connection record:

1. Navigate to the **Circuit Design** screen.
2. Query the required circuit details. Matching results appear.

   3.10.16 Note: **For details, see Querying Circuit Details**

   .

3. Select the details in the **Seq#** field of the relevant record in the **Cross Connections** section.

   Note: All bearers and tributaries related to the cross connection port are also removed from Bearers and Tributaries sections.
4. Click **Delete**.The Cross Connection record is deleted from the database.
5. Click **Save**. A message appears, **"***Your changes have been successfully saved"*.
6. Click **OK**. The Cross Connection record is deleted.

Deleting Alternate Name Records

This section describes how to delete the alternate name of a circuit.

To delete an Alternate Name record:

1. Navigate to the **Circuit Design** screen.
2. Query the required circuit details. Matching results appear.

   3.10.17 Note: **For details, see Querying Circuit Details**

3. Click **Tool Palette ➔ Alternate Names**. The Alternate Circuit Names screen appears.
4. Click **Delete** to delete the alternate name record that you no longer require. The record is deleted from the Alternate Circuit Names screen.

5. Click **Save**. A message appears, **"***Your changes have been successfully saved"*.
6. Click **OK**. The changes are saved to the database.

   Note: Alternate names are unique in the context of the related circuit. In contrast, circuit names are unique across the system. Alternate names can be used as a query criteria in the Circuit Query screen.

3.11 Generic Query

This screen is used to search for information about circuits, network elements, customers, service orders and frames in the Clarity system. The query type and filters that are chosen directly affect the search results.

All query result screens are dynamically linked to the source information. To access this source information, double click a field in the results section of the screen.

Note: There is a Results section in every tab of the Generic Query screen.

Search Conditions

Use the Search Conditions section to type a value and perform a query. The records are retrieved depending on:

- Search criteria
- Query type
- Filters

Search Criteria

The search criterion is the value or word that is typed in the **Search For** field.

Use the **Copy** button to copy information from the Results section to the **Search For** field.

To copy information:

1. Place the cursor in the field and click **Copy**. The information appears in the **Search For** field.
2. Click the destination tab to copy this information to another Query screen.
3. Click **Copy** again. The information appears in the Search For field.

Wildcard characters can be typed in the search criteria to narrow or broaden the search results. The following table describes the wildcard characters.

Table 19: Wildcard Characters

Character	Description
%	The **percent (%) wildcard character** implies that any character can appear in multiple positions represented by the wildcard. Following are examples of all the instances where the % symbol can be used: • When **%** is typed, Clarity system retrieves all records • When **HYD%** is typed, Clarity system retrieves all records that begin with the letters HYD, such as HYD0001 or HYD0002 • When **%0001** is typed, Clarity system retrieves all records

Character	Description
	that end with 0001, such as HYD0001, or CHN0001 • When **%HYD%** is typed, the Clarity system retrieves all records containing the letters HYD
_	The **underscore wildcard character** specifies a single position in which any character can occur. For example, when **HYD000_** is typed as criteria for the search, all records that begin with the characters HYD000 and end with a single character, such as HYD0001 and HYD0002 are retrieved

Note: The query screen uses the % wildcard as the last character by default. This eliminates the need to type a wildcard after the search criteria.

Based on different criteria, the Generic Query screen can be used to search for:

- Circuits
- Network elements
- Customers
- Service orders
- Frames

To navigate to the Generic Query screen:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears.
2. Select **Query ➔ Generic.** The Generic Query screen appears, with the Circuits tab highlighted as the default one.

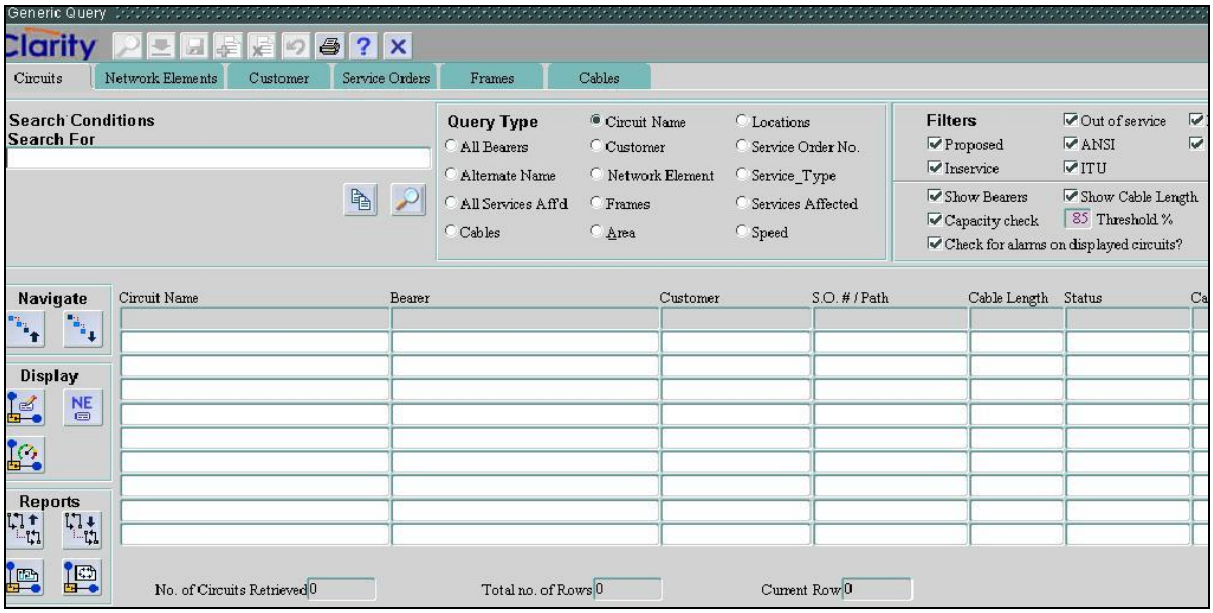

Figure 25: Generic Query

The Generic Query screen contains the following tabs: Circuits, Network Elements, Customer, Service Orders, Frames and Cables.

Note: The **Cables** tab is not used.

3.11.1 Circuits

The Circuits tab is used to search for various circuits based on the search criteria provided.

The task that can be performed using the Circuits tab is:

Searching for circuits based on different criteria

To navigate to Circuits:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears.
2. Select **Query ➔ Generic.** The **Generic Query** screen appears, with the Circuits tab highlighted as the default one.

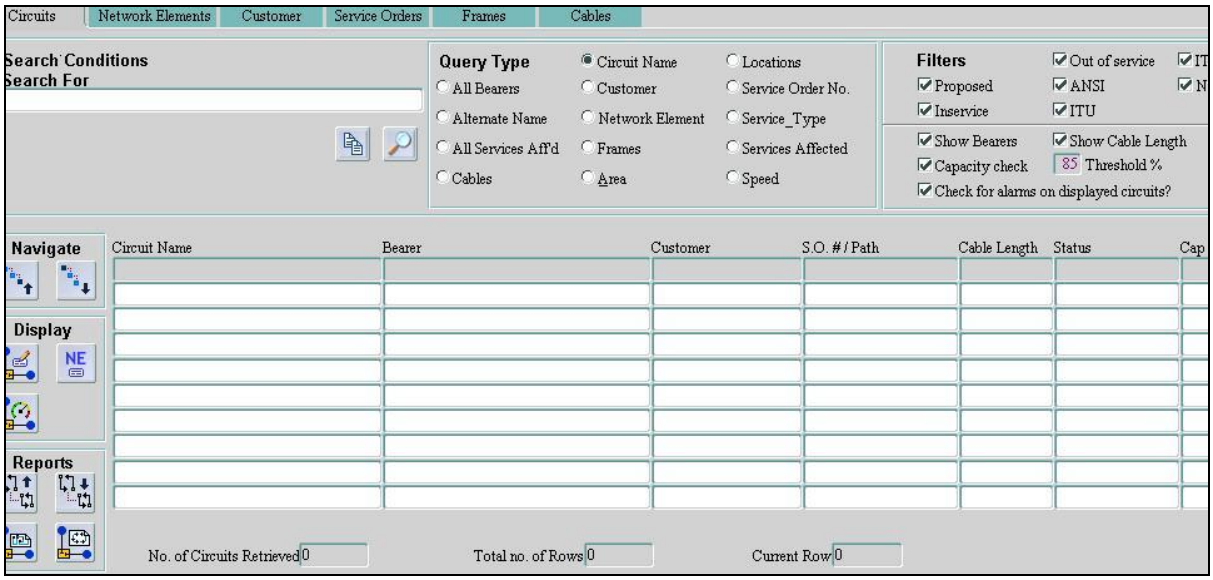

Figure 26: Circuits

Field References

The field names and description of all the fields that appear in the Circuits tab are given below:

Table 20: Field References for Circuits

Field Name	Field Description
Search Conditions Use the Search Conditions section to type a value and perform a query	
Search For	Type the search criterion
Query Type A query type has to be selected to search the database. **Note:** The **Circuit Query** screen always displays a list of circuits. The query types are:	
All Bearers#	-
Alternate Name	Searches for a circuit using an alternative name that has been specified

Field Name	Field Description
All Services Aff'd	Assumes the search criteria is a circuit name and displays a list of carriers and customer leased child circuits
Cables	Searches for circuits that use the typed cable name
Circuit Name	Selected by default, it performs a direct search for circuit names
Customer	Searches for circuits that are owned or leased by the specified customer
Network Element	Retrieves a list of circuits that use the typed network element. In the **Search For** field in the Search Conditions section you need to at least type the type and location, for example, 'HYDGTSC01;CDOT;001'. Instance is optional. It finds all circuits that have a certain type of equipment in a particular location
Frames	Searches for circuits that use the typed frame name
Area	Searches for circuits that are associated with the entered area criteria
Locations	Retrieves all circuits running between any two of the specified sites. At least two locations, delimited by a space have to be typed. A maximum of five locations is accepted
Service Order No.	Searches for circuits that are associated with the specified service order
Service_Type	Searches for circuits that supply the specified service type
Services Affected	Assumes the search criteria is a circuit name and displays a list of child circuits that are customer leased
Speed	Searches for circuits with the specified operation speed
Filters You can also select one or more filters to your search. The filters are described in the table below.	
Proposed	Includes circuits with the status of proposed, confirmed or reviewed
Inservice	Includes circuits with the status of Commissioned or Inservice
Out of Service	Includes circuits with the status of Out of Service, Cancelled, Pending or Delete
ANSI	American National Standards Institute (ANSI) option includes circuits that use the ANSI naming compliance standard
ITU	(International Telecommunication Union (ITU) option includes circuits that use the ITU naming compliance standard
Show Bearers[#]	-
Capacity Check	Displays a **Y** in the Capacity column if the circuit has exceeded the specified threshold level. This level is displayed in the **% Threshold** field
Show Cable Length[#]	-

Field Name	Field Description
Threshold %[#]	-
ITU-NS[#]	-
No Compliance[#]	-
Check for alarms on displayed circuits?[#]	-
Results Section[##] This section displays the results of the query **Note:** The number of circuits retrieved, total number of rows and current row are displayed in the results section. The fields in this section are:	
Circuit Name	The name that identifies the circuit
Bearer[#]	-
Customer	The customer that leases or owns the circuit
S.O. # / Path	The path of the associated circuit
Cable Length[#]	-
Status	The status of the circuit
Cap	Displays a **Y** in the Capacity column if the circuit has exceeded the specified threshold level. This column displays data only if the **Capacity Check** option is selected
Alm[#]	-
Cmp	Indicates the standard to which this circuit complies: • **I** indicates ITU • **A** indicates ANSI
Navigate[#] Use the Navigate buttons to **Zoom up** or **Zoom down** to the bearers or tributaries of a selected circuit	
	Click **Zoom Up** to zoom up through the circuit hierarchy and view the bearers for a particular circuit
	Click **Zoom Down** to zoom down through the circuit hierarchy and view the tributaries for a particular circuit

Field Name	Field Description
Display The buttons in the **Display** section of the **Circuits tab** are used to display the following screens:	
	Click **Circuit Edit** to display the **Circuit Editing** screen
	Click **Network Element** to display the **Network Elements** screen
	Click **Spare Capacity Information** to display the **Circuit Capacity** screen
Reports[#] The buttons in the **Reports** section of the **Circuit Query** screen are listed. Use them to produce a report for the selected circuit	
	Click the **Hierarchy Up** button to view the Hierarchy Up report for the selected circuit
	Click the **Hierarchy Down** button to view the Hierarchy Down report for the selected circuit
	Click the **Circuit Design** button to view the Circuit Design report for the selected circuit
	Click the **Circuit Configuration** button to view the Circuit Configuration report for the selected circuit
No.of Circuits Retrieved	This is an auto-populated field that shows the number of circuits retrieved
Total no. of Rows	This is an auto-populated field that shows the total number of rows retrieved
Current Row	This is an auto-populated field that shows the number of the highlighted row

Fields/ buttons marked with [#] are not used.

All the fields in the section marked with [##] are non-editable and auto-populated.

Searching for Circuits Based on Different Search Criteria

To search for circuits:

1. Navigate to the **Circuits** tab.
2. Select a query type in the **Query Type** section.
3. Type the valid search criteria in the **Search For** field in the Search Condition section.

   Note: Use the **Filters** section to refine the results.

4. Click the search icon in the **Search Conditions** section. Matching records appear.

3.11.2 Network Elements

The Network Elements tab is used to search for various Network Elements based on the search criteria provided.

The task that can be performed using the Network Elements tab is:

Searching for Network Elements based on different criteria

To navigate to Network Elements:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears
2. Select **Query ➔ Generic.** The Generic Query screen appears.
3. Click **Network Elements**. The Network Elements tab is highlighted.

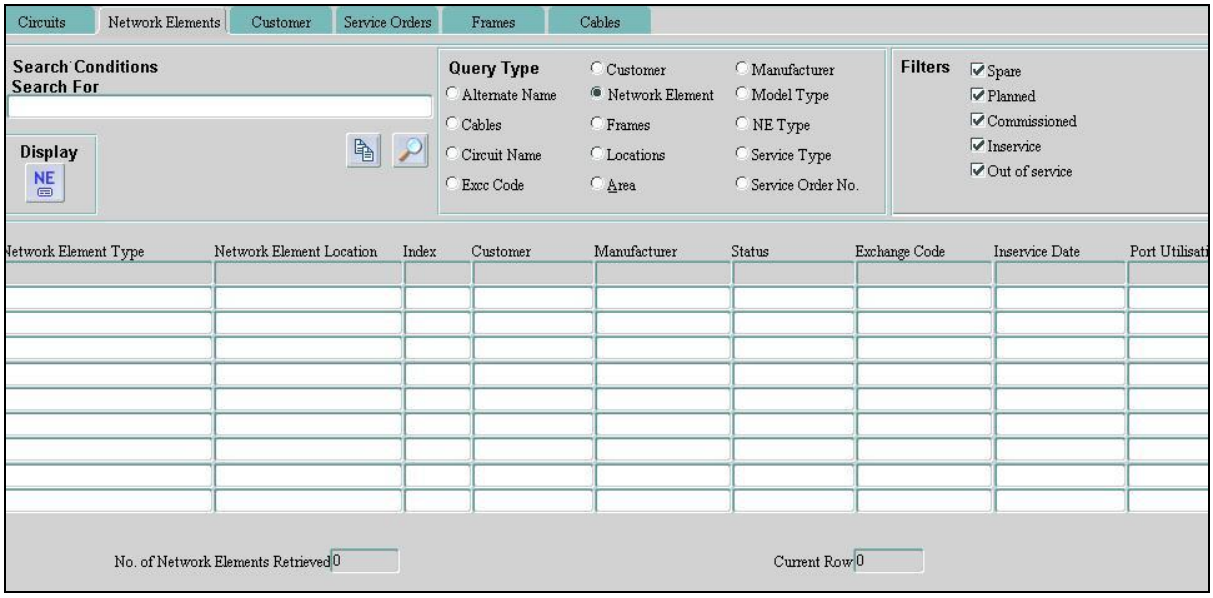

Figure 27: Network Elements

Field References

The field names and description of all the fields that appear in the Network Elements tab are given below:

Table 21: Field References for Network Elements

Field Name	Field Description
Search Conditions Use the Search Conditions section to type a value and perform a query	
Search For	Type the search criterion
Query Type A query type has to be selected to perform the search activity	

Field Name	Field Description
Note: The information that is retrieved using the **Network Element Query** tab is always a list of network elements. The Query Types are:	
Alternate Name	Retrieves the network element that uses the specified alternate name
Cables[#]	-
Circuit Name	Displays all network elements that are used by the specified circuit
Excc Code[#]	-
Customer	Displays all network elements that are used by the specified customer
Network Element	Displays a specific network element that matches the equipment, location and index typed as your search criteria. Separate search criteria with a semi-colon
Frames	Displays all network elements related to the specified frame (type;location required as minimum search conditions)
Locations	Displays all network elements located at the specified site
Area	Searches for network elements that are associated with the entered area criteria
Manufacturer	Displays all network elements that match the specified manufacturer
Model Type	Displays all network elements that match the specified model type
NE Type	Displays all network elements that have the specified network element type
Service Type	Displays all network elements that have the specified service type
Service Order No.	Displays all network elements that are associated with the specified service order
Filters Status field of NE can be used to refine the search. One or more filters can be applied to the search. The filters are:	
Spare	Includes network elements that have a status of spare
Planned	Includes network elements that have a status of planned
Commissioned	Includes network elements that have a status of commissioned
Inservice	Includes network elements that have a status of inservice
Out of Service	Includes network elements that have a status of out of service
Results Section[##] This table displays the results of the query. **Note:** The number of network element records retrieved and the currently selected row are displayed	

Field Name	Field Description
in the results section. The fields in the Results section are:	
Network Element Type	Abbreviation for the network element type
Network Element Location	The physical location of the network element
Index	Index number assigned to the network element. This number is unique to a site to facilitate identification
Customer	The abbreviation for the leased services customer.
Manufacturer	The abbreviation for the manufacturer of the network element
Status	The current status of the network element.
Exchange Code#	-
Inservice Date	This is a date field that show the date on which the network element was defined
Port Utilisation	The percentage of utilised ports
No. of Network Elements Retrieved	This is an auto-populated field that shows the number of network elements retrieved
Current Row	This is an auto-populated field that shows the number of the highlighted row
Display	
	Click **Network Element** to display the relevant **Network Elements** screen for the selected record **Note:** A record must be selected to open this screen.

Fields/ buttons marked with # are not used.

All the fields in the section marked with ## are non-editable and auto-populated.

Searching for Network Elements Based on Different Search Criteria

The following section describes how to search for network elements.

To search for network elements:

1. Navigate to the **Network Elements** tab.
2. Select a query type in the **Query Type** section.
3. Enter the valid search criteria in the **Search For** field in the Search Condition section.

   Note: Use the **Filters** section to refine the results.
4. Click the search icon in the **Search Conditions** section. Matching records appear.

3.11.3 Customer

The Customer tab is used to search for customers based on the search criteria provided.

The task that can be performed using the Customer tab is:

Searching for a customer based on different criteria

To navigate to Customer:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears
2. Select **Query ➔ Generic.** The Generic Query screen appears.
3. Click **Customer**. The Customer tab is highlighted.

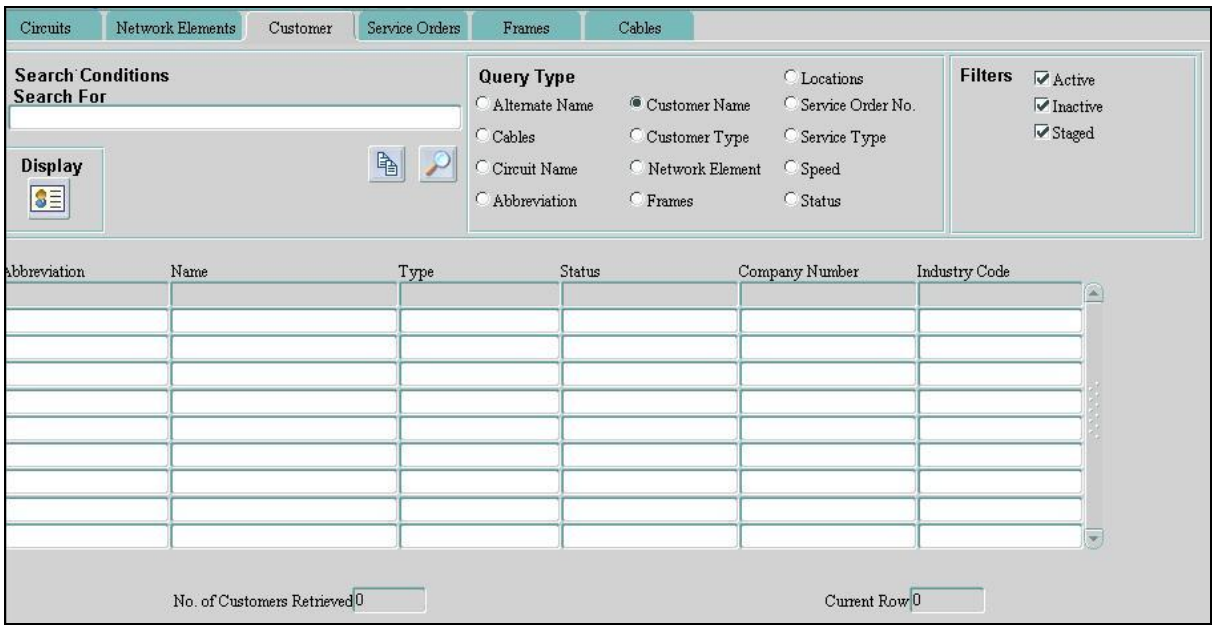

Figure 28: Customer

Field References

The field names and description of all the fields that appear in the Customer tab are given below:

Table 22: Field References for Customer

Field Name	Field Description
Search Conditions Use the Search Conditions section to type a value and perform a query	
Search For	Type the search criterion
Query Type A query type has to be selected to perform the search activity **Note:** The information that is retrieved using the **Customers Query** screen always contains a list of customers. The query types are:	
Alternate Name	Retrieves details of the customer that match the alternate name

Field Name	Field Description
Cables[#]	-
Circuit Name	Retrieves details of the customer who owns the specified circuit
Abbreviation	Retrieves details of all customers that match the specified abbreviation
Customer Name	Retrieves details of the customer that matches the specified search criteria
Customer Type	Retrieves details of all customers that match the specified type
Network Element	Retrieves details of all customers using the specified network element. Search criteria must include equipment, location and index, separated by a semi-colon
Frames	Retrieves details of all customers assigned to circuits using the specified frame name
Locations	Retrieves all customers that reside at the specified location
Service Order No.	Retrieves details of the customer that is associated with the specified service order
Service Type	Retrieves details of all customers utilising services of the specified type
Speed	Retrieves details of all customers that are using services that match the specified speed
Status	Retrieves details of all customers that match the specified status
Filters Customer status field can be applied as a filter. One or more such filters can be used. The filter types are:	
Active	Includes customers that have a status of Active
Inactive	Includes customers that have a status of Inactive
Staged[#]	-
Results Section[##] The Results Section displays the results of the query **Note:** The number of customer records retrieved and the currently selected row appear in the results section. The fields in the Result section are:	
Abbreviation	Unique abbreviation for the customer
Name	The complete customer or company name
Type	The customer classification. For example, Corporate or Residential
Status	The current status of the customer

Field Name	Field Description
Company Number	The customer company registration number
Industry Code	Industry classification
Display	
	Click **Customer Accounts** to display the relevant **Customer Accounts** screen for the selected record **Note:** A record must be selected to open this screen.

Fields/ buttons marked with # are not used.

All the fields marked with ## are non-editable and auto-populated.

Searching for Customers Based on Different Criteria

To search for customers:

1. Navigate to the **Customer** tab.
2. Select a query type in the **Query Type** section.
3. Enter the valid search criteria in the **Search For** field in the Search Condition section.

   Note: Use the **Filters** section to refine the results.
4. Click the search icon in the **Search Conditions** section. Matching records appear.

3.11.4 Service Orders

The Service Orders tab is used to search for service orders based on the search criteria provided.

The task that can be performed using the Service Orders tab is:

Searching for Service Orders based on different search criteria

To navigate to Service Orders:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears.
2. Select **Query ➔ Generic.** The Generic Query screen appears.
3. Click **Service Orders**. The Service Orders tab is highlighted.

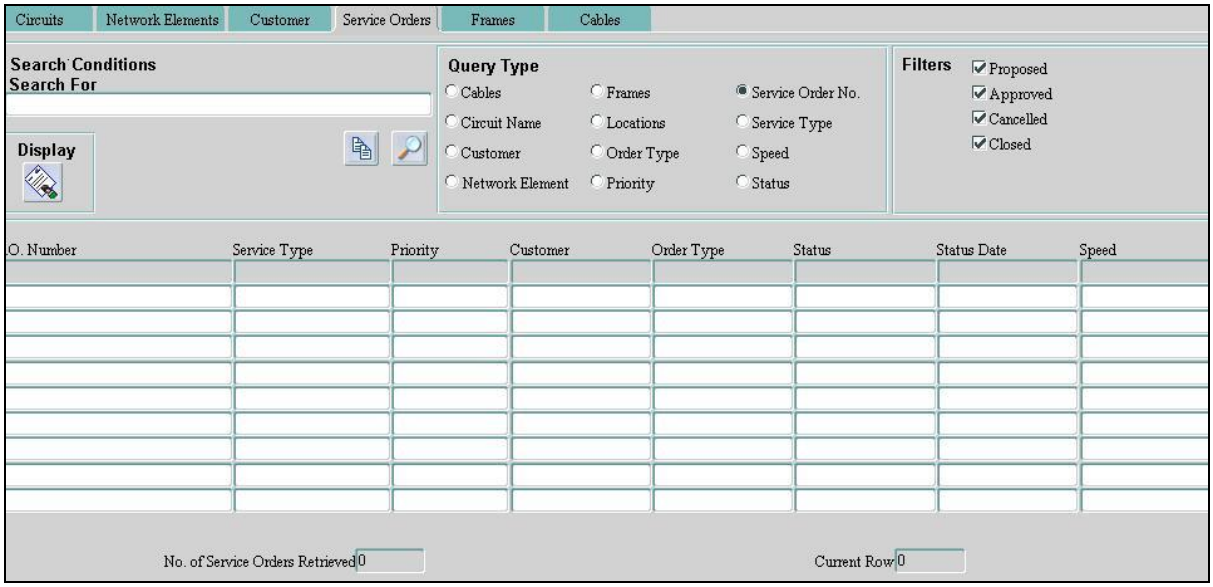

Figure 29: Service Orders

Field References

The field names and description of all the fields that appear in the Service Orders tab are given below:

Table 23: Field References for Service Orders

Field Name	Field Description
Search Conditions Use the Search Conditions section to type a value and perform a query	
Search For	Type the search criterion
Query Type A query type has to be selected to perform the search activity **Note:** The information retrieved using the **Service Order Query** screen contains a list of service orders. The query types are:	
Alternate Names	Displays service order details that are associated with the alternate name
Cables[#]	-
Circuit Name	Displays the details of the service order that is associated with the specified circuit
Customer	Displays all service order details for the specified customer
Network Element	Displays all service orders that involve the specified network element. Search criteria must include equipment, location and index, separated by a semi-colon

Field Name	Field Description
Frames	Displays all service orders that contain the specified frame as part of the order
Locations	Displays all service orders that contain the specified location as part of the order
Order Type	Displays all service order details that match the specified service order type
Priority	Displays all service order details that match the specified service order priority
Service Order No.	Displays the details of the service order that matches the criteria
Service Type	Displays all service order details that match the specified service type
Speed	Displays all service order details that match the specified speed
Status	Displays all service order details that match the specified status
Filters You can also apply one or more filters to your search. The filters are:	
Proposed	Includes service orders with a status of Proposed
Approved	Includes service orders with a status of Approved
Cancelled	Includes service orders with a status of Cancelled
Closed	Includes service orders with a status of Closed
Results Section ## This section displays the results of the query. **Note:** The number of service order records retrieved and the currently selected row are displayed in the results section. The fields in the Results section are:	
S.O. Number	Unique service order number
Service Type	The type of service requested by the customer
Priority	The level of importance assigned to this service order
Customer	Abbreviation for the customer requesting the service
Order Type	The type of service requested
Status	The current status of the service order
Status Date	The date the status was last updated
Speed	The operational speed of the circuit or bearer for this service

Field Name	Field Description
Display	
	Click **Service Order Details** to display the **Service Orders** screen in the context of the selected record **Note:** A record must be selected to open this screen.

Fields/ buttons marked with # are not used.

All the fields marked with ## are non-editable and auto-populated.

Searching for Service Orders Based on Different Criteria

To search for service orders:

1. Navigate to the **Service Orders** tab.
2. Select a query type in the **Query Type** section.
3. Type the valid search criteria in the **Search For** field in the Search Conditions section.

   Note: Use the **Filters** section to refine the results.
4. Click the search icon in the **Search Conditions** section. Matching records appear.

3.11.5 Frames

The Frames tab is used to search for various frames based on the search criteria provided.

The task that can be performed using the Frames tab is:

Searching for frames based on different search criteria

To navigate to Frames:

1. Click **Inventory** on the Clarity homepage. A dropdown list appears
2. Select **Query** ➔ **Generic.** The Generic Query screen appears.
3. Click **Frames**. The Frames tab is highlighted.

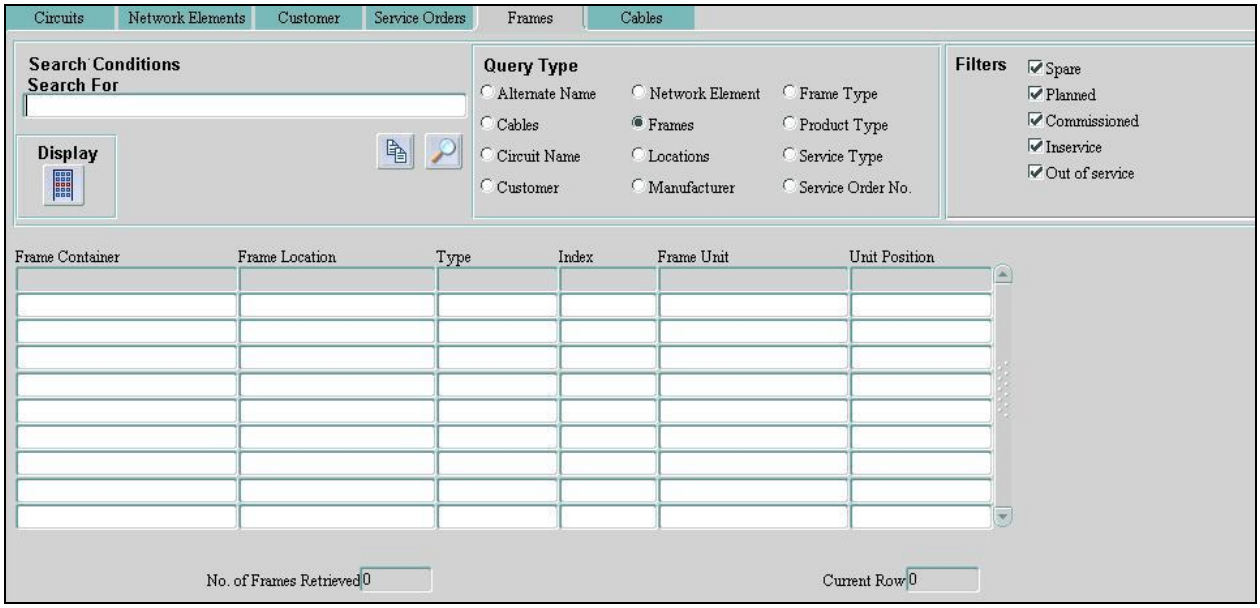

Figure 30: Frames

Field References

The field names and description of all the fields that appear in the Frames tab are given below:

Table 24: Field References for Frames

Query Type	Description
Search Conditions Use the Search Conditions section to type a value and perform a query	
Search For	Type the search criterion
Query Type A query type has to be selected to perform the search activity **Note:** The information that is returned in the **Frames** tab is always a list of frames. The query types are:	
Alternate Name	Displays the frames that are associated with the alternate name
Cables[#]	-
Circuit Name	Displays the details of the frame that is associated with the specified circuit
Customer	Displays all frames for the specified customer
Network Element	Displays all frames that are related to the specific network elements search criteria
Frames	Displays all frames that are related to the specific frames search criteria
Locations	Displays all frames at the specified location

Query Type	Description
Manufacturer	Displays all frames made by the specified manufacturer
Frame Type	Displays all frames of the specified frame type
Product Type	Displays all frames of the specified product type
Service Type	Displays all frames of the specified service type
Service Order No.	Displays the details of the service order that matches the criteria
Filters One or more filters can be applied to the search. The filters are:	
Spare	Includes frames that have status as Spare
Planned	Includes frames that have status as Planned
Commissioned	Includes frames that have status as Commissioned
Inservice	Includes frames that have status as Inservice
Out of service	Includes frames that have status as Out of service
Results Section[##] This section displays the results of the Frames query **Note:** The number of records retrieved and the currently selected row are displayed in the results section.	
Frame Container	The name of the frame container
Frame Location	The location of the frame
Type	The type of frame
Index	The index number assigned to the frame. This number is unique to a location to facilitate identification
Frame Unit	The name of the frame unit
Unit Position	The unit position in the frame or rack
Display	
	Click **Frame** to display the **Frames** screen for the selected frame record

Fields marked with [#] are not used.

All the fields marked with [##] are non-editable and auto-populated.

Searching for Frames Based on Different Criteria

To search for frames:

1. Navigate to the **Frames** tab.
2. Select a query type in the **Query Type** section.
3. Type the valid search criteria in the **Search For** field in the Search Conditions section.

   Note: Use the **Filters** section to refine the results.
4. Click the search icon in the **Search Conditions** section. Matching records appear.

4 Order Management

Order Management is used for entry and management of information that is generic across the Clarity system. This includes access rights, settings, customers and accounts, employee and account manager contacts and work group definitions.

Work Flow Management

Screens related to work flows are used to view the tasks assigned to a work group. This section describes how to use the work flow management. These help to plan the resources and action the tasks accordingly. Service orders, work orders and work order activities assigned to a particular workgroup can be viewed. These screens provide a method of tracking related work flows and associated tasks for a selected work group. The Work Flow Management screens are:

- Inbox - Work orders/Tasks
- Service Orders Workflow Management

Common Work Flow Functionalities

Functionalities common to all work flow management screens include:

- Sorting the display order of data
- Refreshing display results according to a selected period
- Accessing the records of data displayed

Changing the Display Order by Sorting

Records can be sorted so that they appear in an ascending or descending order, using column header buttons. With the first click on the button in column heading, the records are sorted in ascending order, based on the column data. When the button in the column heading is clicked again, the records are sorted in descending order. By clicking the button in the column heading for the third time, the display changes to ascending sort order yet again.

Refreshing Results

To refresh the display in the work flow screens:

1. Enter the refresh period in minutes or as a decimal-based percentage of a minute in the **Timer in Minutes** field. For example, 0.5 is equivalent to 30 seconds
2. Click **Set**. The results are refreshed.

The screens described in this section are:

- Work Groups Definition
- Employees

- Inbox
- Work Groups
- Customer View

4.1 Work Groups Definition

The Work Group Definition screen contains information about the various work groups created. Each of these work groups provide a specific business function.

The task that can be performed using this screen is:

Viewing Work Groups

To navigate to the Work Groups Definition screen:

1. Click **Contacts** on the Clarity home page. A dropdown list appears.
2. Select **Work Group Definition**. The Work Groups Definition screen appears.

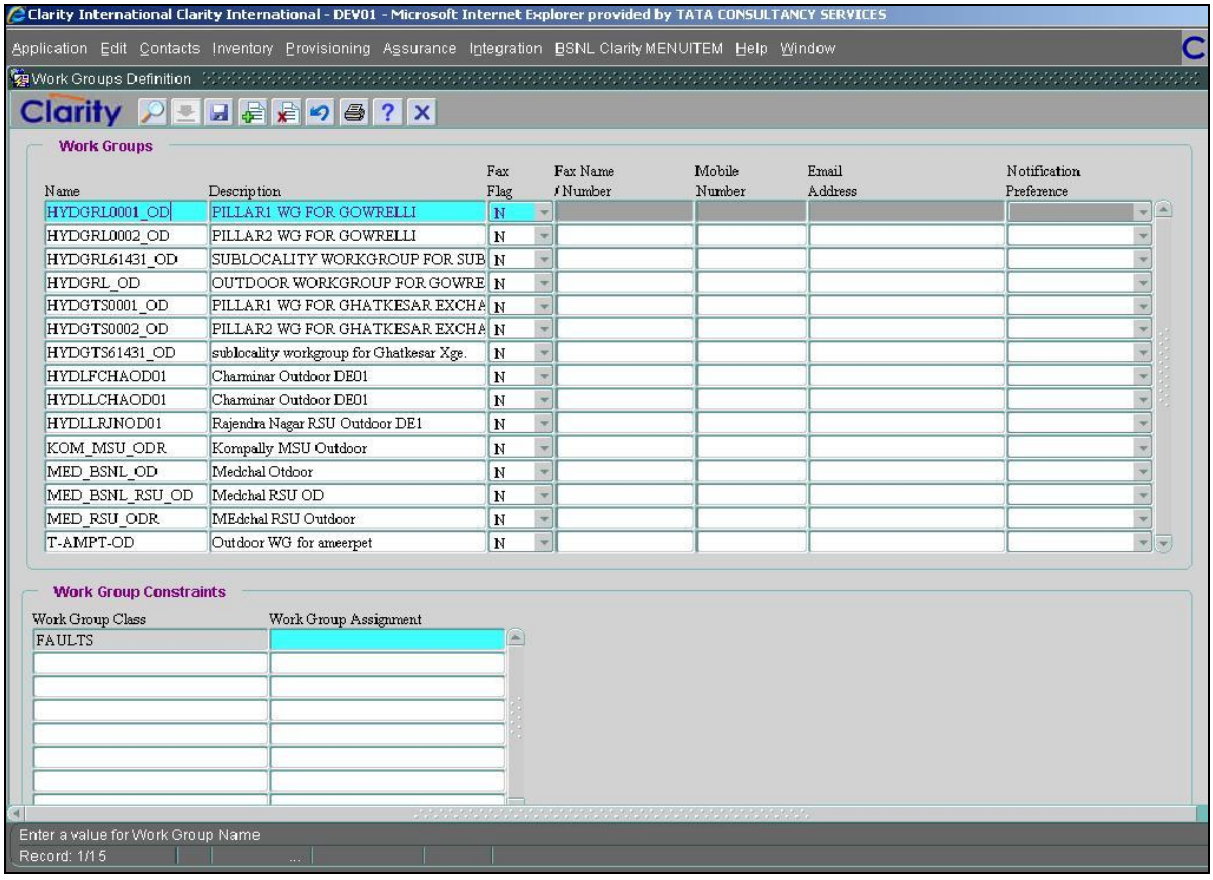

Figure 31: Work Groups Definition

Note: This screen can only be used to view work groups.

Field References

The Field Names and Description for all the fields that appear in the Work Groups Definition screen are given below:

Table 25: Field References for Work Groups Definition

Field Name	Field Description
Work Groups[#]	
Name	This is a mandatory field that contains the name of the work group
Description	This is a mandatory field that contains a description of the work group
Fax Flag	This is a mandatory dropdown list that indicates if a work order or service order must be faxed to the work group. This field displays two values, **N** for No and **Y** for Yes
Fax Name/ Number	This is an optional field for the work group's fax details
Mobile Number	This is an optional field for the work group's mobile number details
Email Address	This is an optional field for the email address of the work group
Notification Preference	This is a dropdown list that contains options for the preferred method of email notification. The options are: • MAILHTML • MAILTEXT
Work Group Constraints	
Work Group Class	This is an optional field, where details are required only in case of assurance
Work Group Assignment	This is an optional field, where details are required only in case of assurance

[#]Enter the search criteria either in the **Name** or **Description** fields.

4.1.1 Viewing Work Groups

To view work groups:

1. Navigate to the **Work Groups Definiton** screen.
2. Click **Query**. The screen enters query mode.
3. Type the search criteria in the **Name** field. For example, %HYDGTS%

   Note: In the example, HYD refers to the SSA and GTS refers to the Exchange.
4. Click **Query**. The work groups with the specified string appear.

4.2 Employees

The Employees screen displays details of the employee's profile, including the work group with which the employee is associated. This screen maintains valid employee profile details, and can be used to provide access permissions that enable the employee to perform specific functions.

Note: Only an administrator is authorised to give access permissions.

The task that can be performed using this screen is:

Viewing Employees

Note: This screen is non-editable. You can only use this screen to view employee details.

To navigate to the Employees screen:

1. Click **Contacts** on the Clarity home page. A dropdown list appears.
2. Select **Employees**. The Employees screen appears.

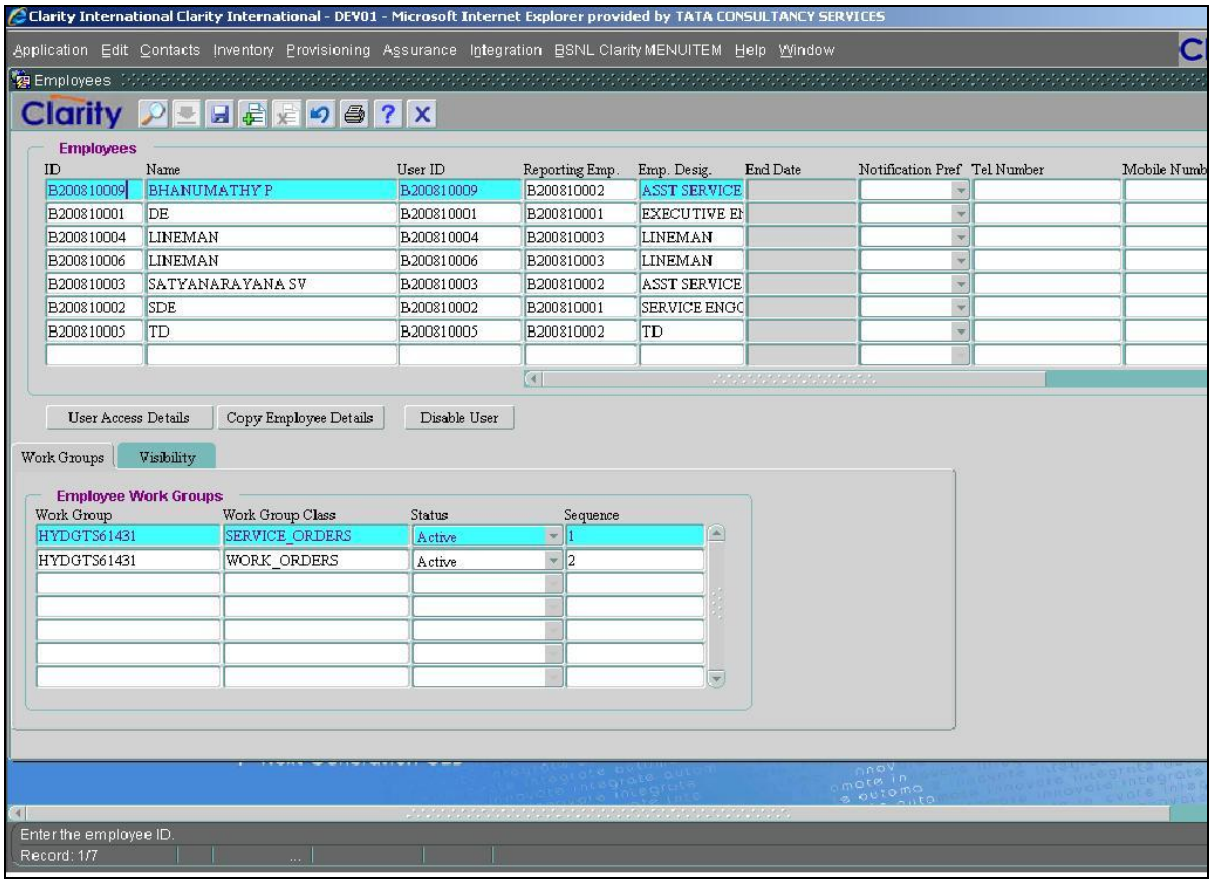

Figure 32: Employees

Field References

The field names and description of all the fields that appear in the Employees screen are given below:

Table 26: Field Referencs for Employees

Field Name	Field Description
Employees	
ID	This is a mandatory field containing a unique employee identifier allocated by BSNL. According to the present convention, if an Employee ID is B200810001, it means 2008 is the year of joining for employee and 10001 is the sequence
Name	A mandatory field, it contains the name of the employee
User ID	This is a mandatory field for the Oracle User ID used to login to Clarity
Reporting Emp.	This is a mandatory field for the employee ID of the reporting employee
Emp. Desig.	An optional field, it contains a dropdown list for the employee's preferred designations. For example, DE
End Date	An optional field, that displays the end date to terminate the employee's

Field Name	Field Description
	access
Notification Pref	An optional field, it contains a dropdown list for the employee's preferred mode of communication.
Tel Number	This is an optional field for the employee's contact phone number
Mobile Number	This is an optional field for the employee's mobile number
Fax Number	This is an optional field for the fax number of the employee
Email Address	This is an optional field for the employee's email id
Email Password	This is an optional field for the password for the employee's email id
User Access Details[##]	This button is used to grant acess to employees to perform specific tasks. Authorised system administrators have the right to define access permissions granted to the employee to add, modify or delete this data
Copy Employee Details[##]	This button is used to copy details like work groups, visibility and roles of one employee to another employee's profile
Disable User[##]	This button is used to terminate access by populating the end date for employee access
Work Groups ➔ Employee Work Groups	
Work Group	Work groups to which the employee is affiliated. LOV is used to select the value
Work Group Class	The class of work group that the employee belongs to. You can select from Service_Orders and Work-Orders, using the LOV
Status	The status of the work group the employee belongs to. For example, Active. The dropdown list is available to select the values **Note**: The status can be updated only by admin user.
Sequence	This is a mandatory field for the sequence number to indicate whether this is the one and only default work group for an active employee for a work class. By convention, the sequence number 1 is the default work group
Work Groups ➔ Visibility[#]	
Visible Work Group	-
Work group Class	-

The section marked with [#] is not used.

Only the admin user is authorised to use the buttons marked with [##].

4.2.1 Viewing Employees

The Work Groups tab displays the work group details such as work group name, work group class, status of the work group and sequence.

Viewing the Employees

Prerequisites to proceed: The following reference data needs to defined before you can view the employee details:

- Work Group Name in the Work Groups screen: A valid work group profile must exist for each employee as determined by the employee's primary function
- Access Profile in the Application menu: A valid access profile must exist for each level of user access

To view the Employees:

1. Navigate to the **Employees** screen.
2. Click **Query**. The screen enters query mode.
3. Type the search criteria in the **ID**, **Name** or **User Id** field. For example, the search criteria B20081% can be entered in the **ID** field.
4. Click **Query**. The employees' details with the specified string appear along with their work groups.

4.3 Inbox

The Inbox screen is used to manage the work flow of the Work Order, Work Order Activity and Service Implementation Task. It provides a list of work orders or service orders for the queried work group. It is used to view all tasks, work orders, activities and service orders associated with the work group.

The tasks that can be performed using this screen are:

- Querying for Work Orders
- Completing Work Orders
- Querying Service Implementation Tasks

  Note: The Activities tab is not used.

To navigate to the Inbox screen:

1. Click **Provisioning** on the Clarity homepage. A dropdown list appears.
2. Select **Inbox ➔ Work Orders/Tasks**. The Inbox screen appears.

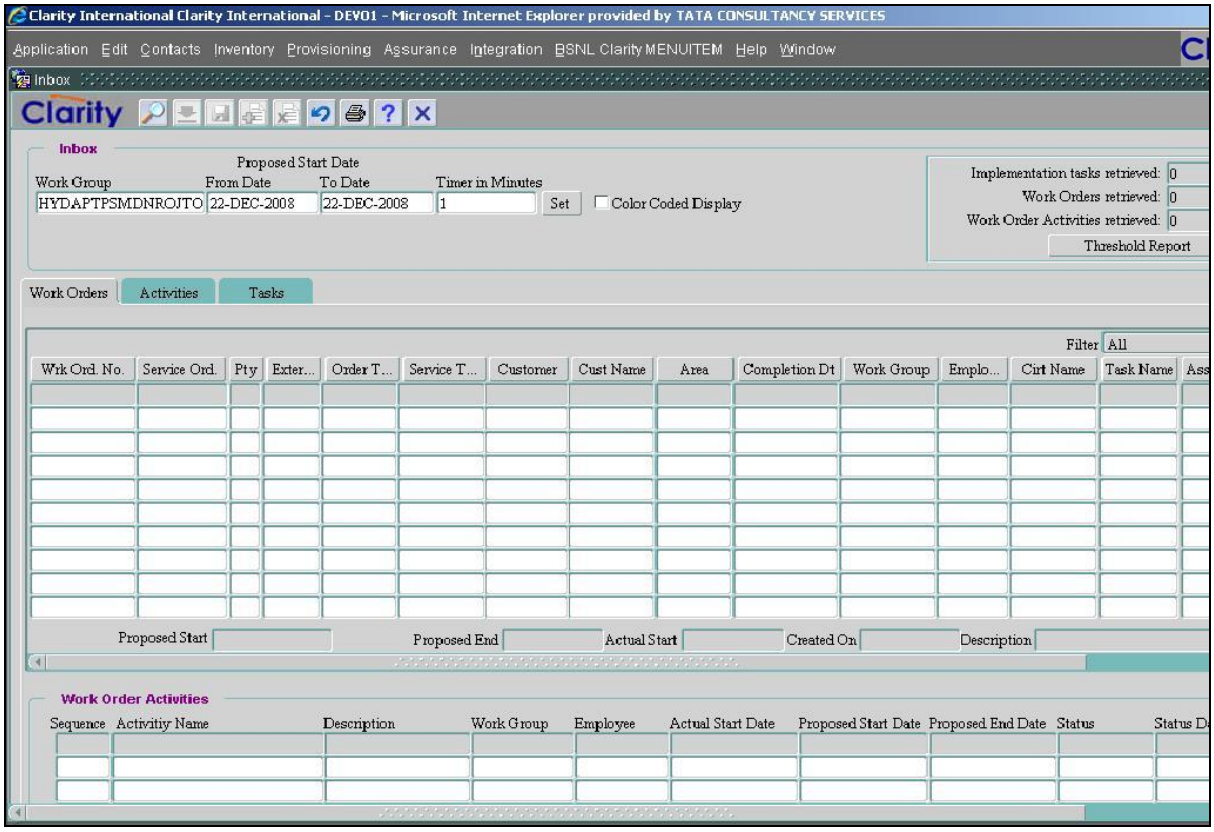

Figure 33: Inbox

4.3.1 Work Orders

The Work Orders tab displays all the work orders assigned to the queried workgroup. Double click any record in this section to open the Work Orders for the selected service order record. Details such as work order number, service order number, order type, service type, customer name and the corresponding exchange appear in this tab.

The tasks that can be performed using this tab are:

- Querying for Work Orders
- Completing a Work Order

To navigate to Work Orders:

Query a work order work flow. The Work Orders tab appears.

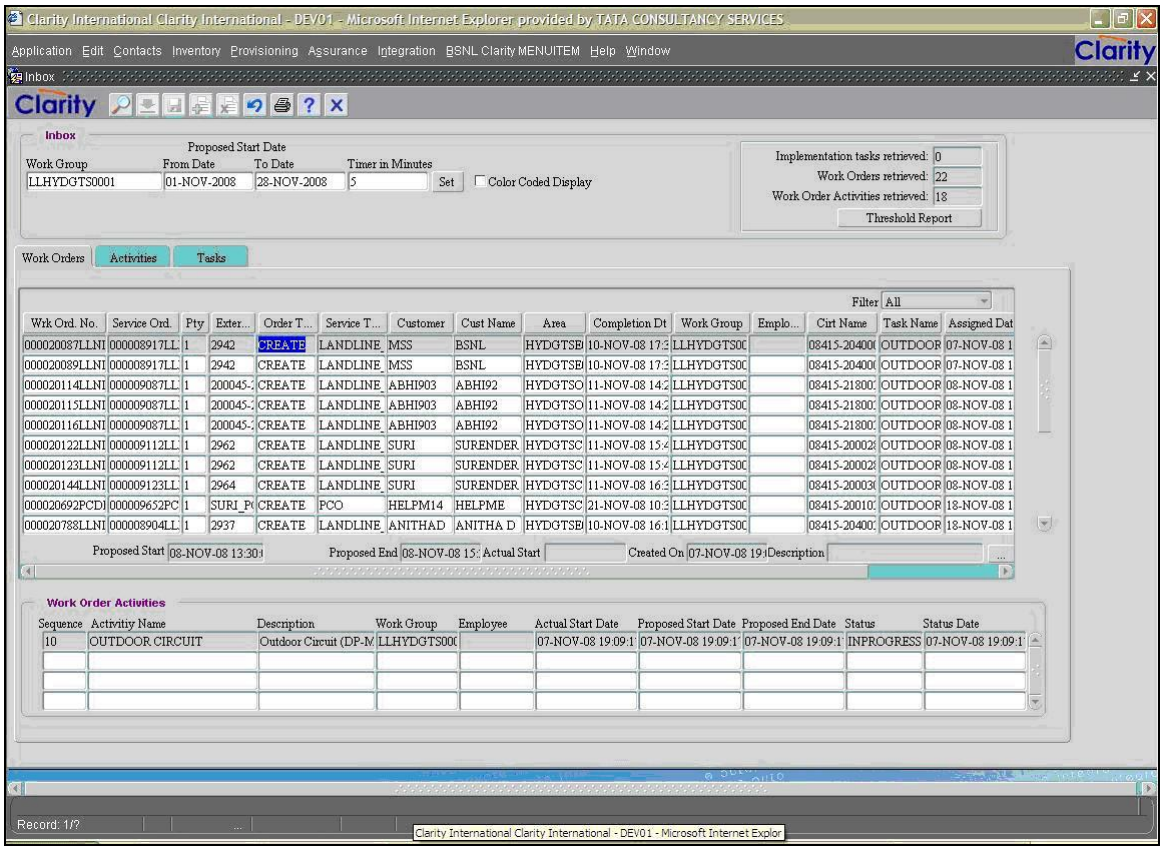

Figure 34: Inbox

Field References

The field names and description of the fields that appear in the Work Orders tab are given below:

Note: The fields in the Work Orders tab are non-editable.

Table 27: Field References for Work Orders

Field Name	Field Description
Inbox **Note:** Click the buttons in the header row at the top of each column to sort the view.	
Work Group	It is a mandatory field for the search criteria. This consists of the name of the work group. Use LOV to select a work group name
Proposed Start Date From Date#	It is an optional field that contains data for search criteria for the proposed start date of the work orders to be displayed.It displays all work orders that have a proposed start date from the entered date
Proposed Start Date To Date#	It is an optional field that contains the proposed start date of the work order displayed. It displays all work orders that have a proposed start date before the entered date. If no date is mentioned, the data is displayed till date

Field Name	Field Description
Timer in Minutes	It is an optional field that contains the refresh period, in minutes. The Clarity system re-queries the database and refreshes this screen after the period of time that is entered in this field. This value is valid only for the session in which it is set. The default value is one minute
Set	Click the **Set** button to set the timer value to determine how often the system re-queries the database to refresh the screen. Once the timer value is typed, click **Set**
Color Coded Display	It is optional to select the checkbox. This field toggles the view between colour coded and normal display. The colour coded display represents each status as a different colour
Implementation tasks retrieved	This shows the count of the implementation tasks that are displayed in the Tasks tab
Work Orders retrieved	This shows the count of the work orders that are displayed in the Work Orders tab
Work Order Activities retrieved	This shows the count of the work order activites that are displayed in the Activities tab
Threshold Report	Click the **Threshold Report** button to generate a report containing the list of work groups with the number of tasks associated **Note**: This button is not used.
Work Orders	
Work Ord. No.	The unique work order identification number
Service Ord.	The unique number generated by the system that identifies a particular service order number
Pty	The priority assigned to the service order corresponding to the work order
External ID	The Service Order external ID from CRM
Order Type	The type of transaction with which the work order is related. For example, Create, Modify, Delete
Service Type	The type of service related to current work order
Customer	The abbreviation of the customer associated with the service order
Cust Name	The name of the customer associated with the service order

Field Name	Field Description
Area	The area code of the switch associated with the service order
Completion Dt	The date on which the work order is completed
Work Group	The name of the work group that is assigned to the work order
Employee ID	The ID of the employee assigned to implement the work order
Cirt Name	The name of the circuit associated with the service order
Task Name	The name of the task associated with the service order
Assigned Date	The date on which the work order is assigned
Status	The current status of the work order
Status Date	The date on which the work order status was changed
Proposed Start	The date on which the work order is due to commence
Proposed End	The date on which the work order is due to be completed
Actual Start	The date on which the work order commences, that is, the date and time at which the work order status is changed to 'INPROGRESS'
Created On	The date on which the work order is created
Description	An alpha-numeric description of the work order
Filter##	-
Work Order Activities##	

#If both a start and end date are entered, only work orders that were created within that range appear. This is inclusive of the dates entered.

The field and section marked with ## are not used.

Note: The Inbox section is common for the Work Orders, Activities and Tasks tabs.

Querying for Work Orders

Prerequisites to proceed: The workgroup to which the service orders, work orders, or tasks are assigned. To act on the queried service orders/ work orders/ tasks, you have to be assigned to this workgroup.

To query a work order:

1. Navigate to the **Inbox** screen.
2. Enter the filter criteria in the **Work Group** and **From Date** fields in the Inbox section.

Note: The value in **To Date** field can be entered. If no date is mentioned here, by default the data is displayed till date.

3. Enter a value in the **Timer in Minutes** field to determine how frequently you want the screen to re-query.
4. Click **Set**. The relevant work orders under the specified work groups appear in the Work Orders section.

   Note: Records are refreshed when:

   - **Set** is clicked.
   - The timer expires
5. Use the button headings to toggle the sort order of the displayed records.

Completing a Work Order

To complete a work order:

1. Navigate to the **Inbox** screen.
2. Perform steps 2-5 of Querying a Work Order Workflow. The matching work order appears.
3. Change the status to InProgress when you are able to begin work on a work order. This indicates to the other users that you are currently working on a work order.

   Note:

   i. You can only change the status of a work order that has been assigned to your work group. If the system does not permit you to change the status of a work order to InProgress, you cannot begin work on it.

   ii. To change the status to InProgress, change the value of the **Status** field using the LOV in the Work Order section, from Assigned to InProgress.
4. Click **Attributes**. Details of the Attributes tab appear.
5. Enter the values of mandatory attributes under the **Attributes** tab in the Work Orders Screen.

   Note: For details, see Work Orders.
6. Click **Save**. The activity's status is updated to Completed, which notifies the project administrator that you have completed work on it.

4.3.2 Tasks

The Service Implementation tasks are displayed in this tab with details like service order number, order type, service type, customer name, task name, work group and so on.

The task that can be performed using this screen is:

Querying Service Implementation Tasks

To navigate to the Tasks tab:

Query a task. The matching task appears.

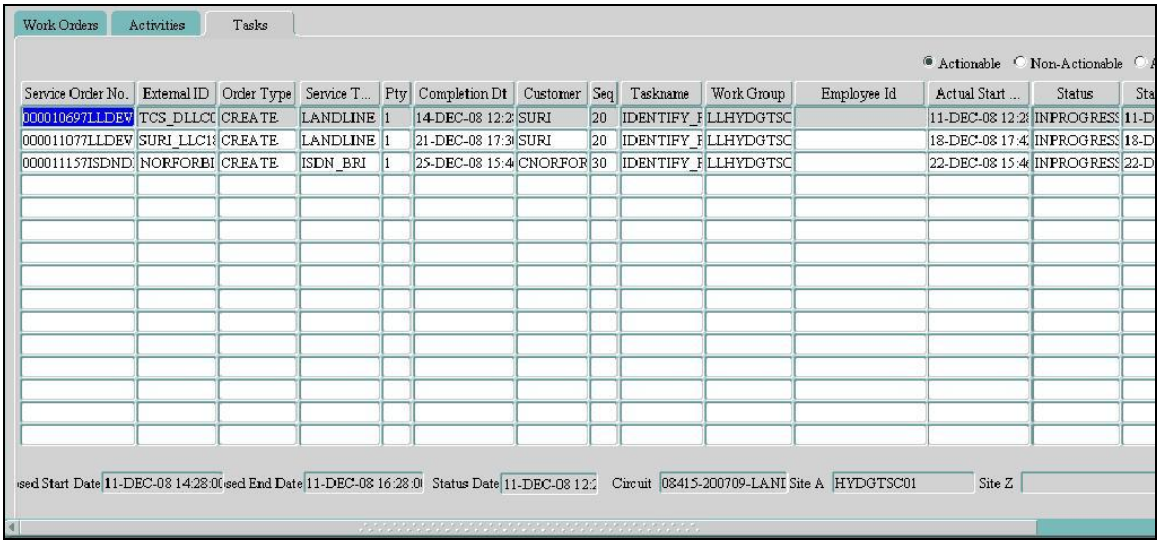

Figure 35: Tasks

Field References

The field names and description of the fields that appear in the Tasks tab are given below:

Note: The fields in the Tasks tab are non-editable.

Table 28: Field References for Tasks

Field Name	Field Description
Actionable#	Select this radio button to display all actionable implementation tasks that can be actioned immediately because previous dependency tasks have been completed
Non Actionable#	Select this button to display all non-actionable implementation tasks that are assigned to the work group, but cannot be actioned yet as the task has a dependency on its previous tasks
All#	Select this radio button to display all implementation tasks of any status
Service Order No.	The unique number generated by the system that identifies a particular service number
External ID	The ID assigned to the Service Order by the CRM system
Order Type	The type of transaction order related to this implementation task. For example, Create
Service Type	The type of service related to this implementation task
Pty	The priority or severity level assigned to the service order
Completion Date	The date when the service order should be completed

Field Name	Field Description
Customer	The customer associated with the service order
Seq	The completion sequence of the implementation task
Taskname	The name of the task indicating the nature of work required
Work Group	The work group responsible to action this implementation task
Employee ID	The ID of the employee assigned to implement the service task
Actual Start Date	The date on which the task commences
Status	The status of the implementation task. For example, Assigned, In progress, Completed and Cancelled
Status Date	The date on which the status of the implementation task was changed
Proposed Start Date	The estimated start date of the implementation task
Proposed End Date	The date on which the implementation task is estimated to be completed
Status Date	The date on which the status of the implementation task was changed
Circuit	The circuit associated with the service order
Site A##	-
Site Z##	-

#One of the options among **Actionable**, **Non-Actionable**, **All** can be selected to view the work orders. The remaining fields are non-editable.

Fields marked with ## are not used.

Querying Service Implementation Tasks

Prerequisites to proceed: The workgroup name to which the service orders/ work orders/ tasks are assigned. To act on the queried service orders/ work orders/ tasks, you have to be assigned to this workgroup.

To query a service implementation task:

1. Navigate to the **Inbox** screen.
2. Enter the filter criteria in the **Work Group** and **From Date** fields in the Inbox section.

   Note: You can also enter the value in **To Date** field. If no date is mentioned here, by default the data is displayed till date.
3. Enter a value in the **Timer in Minutes** field to determine how often the screen is refreshed.
4. Click **Set**. The Work Order details appear.
5. Click **Tasks** to view the details in this tab.

6. Select one of the following options to filter your view of the related tasks:
   - **Actionable Activities** to list all tasks with an open status, that is, Assigned or In Progress
   - **Non-Actionable Activities** to list all tasks with the Completed status
   - **All Activities** to list all tasks of any state, that is, Assigned, In Progress or Completed

   The relevant tasks under the specified work groups appear in the **Tasks** tab.
7. Click **Set**. The screen is refreshed with records matching the search criteria.

   Note: Records are refreshed when:
   - **Set** is clicked
   - The timer expires
8. Use the button headings to toggle the sort order of the displayed records.

4.4 Work Groups

The Work Groups screen is used to query work groups and view information related to each work group. This information includes work group identity, employees, service orders, service implementation tasks, work orders and work order activities that are displayed in various tabs.

The tabs in the Work Groups screen are:

Employees

The Employees tab displays the names of employees in the selected work group. Employee details like employee user id, email address and mobile number are also displayed.

Service Orders

The Service Orders tab displays the current service orders created by the selected work group. The service order details like service order number, type of the service, service identification id, status of the service order and the date are displayed.

Service Implementation Tasks

The Service Implementation tab displays the tasks that are assigned to the selected work group. Task details like service order number, name of the task, start date of the task, end date of the task, status of the task and the status date are displayed.

Work Orders

The Work Orders tab displays the current work orders created by the selected work group. Work order details like work order number, type of the order, order creation date, order due date, status of the order and status date are displayed.

Work Order Activities

The Work Order Activities tab displays the current work order tasks that are assigned to the selected work group. The work order activity details like work order number, activity name, activity start date, activity due date, status of the work order and the status date of the work order are displayed.

Note: The Work Groups screen is non-editable.

The task that can be performed using this screen is:

Viewing Work Groups

To navigate to the Work Groups screen:

1. Click **Contacts** on the Clarity home page. A dropdown list appears.
2. Select **Query ➔ Work Groups**. The Work Groups screen appears.

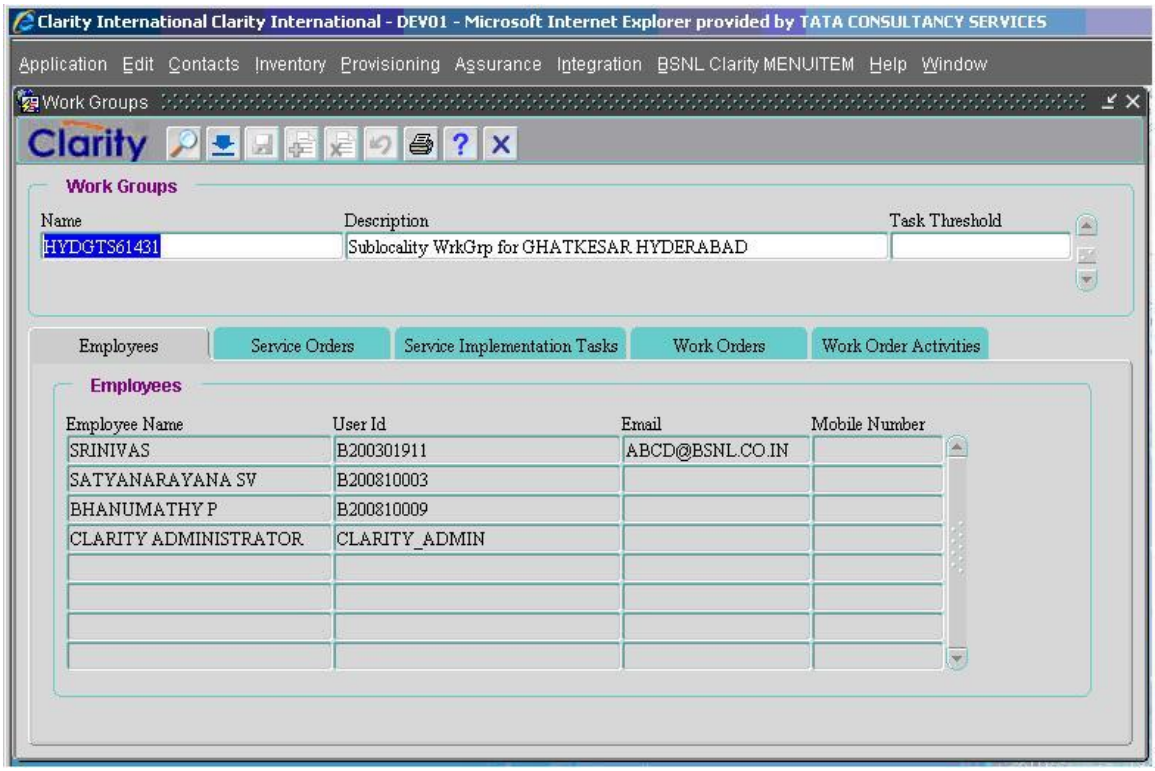

Figure 36: Work Groups

Field References

The field names and description of all the fields in the Work Groups screen are given below:

Table 29: Field References for Work Groups

Field Name	Field Description
Work Groups#	
Name	The name of the work group is typed to query the details
Description	Displays the description of the work group
Task Threshold	This is an optional field for the Task Threshold of the work group
Employees	
Employee Name	This is a mandatory field containing the name of the employee
User Id	This is a mandatory field containing the employee's user identification
Email	This is an optional field for the employee's email address
Mobile Number	This is an optional field for the employee's mobile number
	This tab contains data only when service orders are available for the queried work group. The service orders include all the orders that are open, closed or cancelled

Field Name	Field Description	
Service Orders	Number	This is a mandatory field containing the unique service order identifier number
	Service Type	This is the mandatory field containing the service order type, for example, LANDLINE
	Order Type	This is a mandatory field containing the service Order type. Valid order types are: • Create • Modify • Delete • Fault • Restore • Suspend
	Service Id	This is the mandatory field containing the unique identifier for customer's service
	Status	This is a mandatory field containing the current status of the service order. Valid status are: • Approved • Proposed • Cancelled • Closed • Recommended • Reviewed • Waiters **Note:** The Approved, Recommended, Reviewed and Waiters options are not used.
	Status Date	This is a mandatory field containing the date and status value was changed to current status value
	Completion Date	This is a mandatory field for the service order completion date
Service Implementation Tasks	This tab contains data only when service implementation tasks are available for the queried work group. These include all the tasks that are open, closed or cancelled	
	Service Order Number	This is a mandatory field containing the unique service order identifier number
	Task Name	This is a mandatory field containing the name of the service implementation task
	Start Date	This is a mandatory field containing the date the work group is supposed to start the work on the service implementation task
	End Date	This is a mandatory field containing the date the work group is supposed to finish the work on the service implementation task

Field Name	Field Description	
	Status	This is a mandatory field containing the status of the service implementation tasks. Valid status are: • Approved • Assigned • Inprogress • Completed
	Status Date	This is a mandatory field containing the date the status value was changed to current status value
Work Orders	This tab contains data only when work orders are available for the queried work group. The work orders include all the orders that are open, closed or cancelled	
	Number	This is a mandatory field containing the unique work order identifier number
	Revision	This is a mandatory field containing the Revision number of the work order
	Order Type	This is a mandatory field containing the Work Order Type. Valid work order types include Create, Modify and Delete
	Created Date	This is a mandatory field containing the date when the work order was created
	Due Date	This is a mandatory field containing the date the work order is due for completion
	Status	This is a mandatory field containing the current status of the work order. Valid work order status are: • Assigned • In Progress • Cancelled • Closed
	Status Date	This is a mandatory field containing the date the current status was assigned
Work Order Activities	The Work Orders Activities tab contains data only when work order activities are available for the queried work group. These include all the activities that are in the open, closed or cancelled status	
	Work Order Number	This is a mandatory field containing the unique auto-populated work order identifier number
	Revision	This is a mandatory field containing the Revision number of the work order
	Activity Name	This is a mandatory field containing the name of the task to be completed

Field Name	Field Description	
	Start Date	This is a mandatory field containing the expected start date of the work order activity
	Due Date	This is a mandatory field containing the expected finish date of the work order activity
	Status	This is the mandatory field containing the current status of the work order activity. Valid status are: • Assigned • In progress • Completed
	Status Date	This is a mandatory field containing the date the current status was assigned

#Type the search criteria either in the **Name** or **Description** field.

4.4.1 Viewing the Work Groups

To view the Work Groups:

1. Navigate to the **Work Groups** screen.
2. Click **Query**. The screen enters Query mode.
3. Enter the search criteria. For example, %HYDGTS%.
4. Click **Query**. The Work Groups with the specified string appear.

4.5 Customer View

The Customer View screen displays the accounts, contacts, customer addresses, services and service orders of the selected customer. This screen shows all the services associated with the customer in a single view. It is a non-editable screen.

Note: The Contacts, Customer Addresses and Faults tabs in this screen are not used.

Tasks that can be performed using this screen are:

- Viewing customer account details
- Viewing services provided
- Viewing customer service orders

To navigate to the Customer View screen:

1. Click **Contacts** on the Clarity home page. A dropdown list appears.
2. Select **Query ➔ Customer View**. The Customer View screen appears.

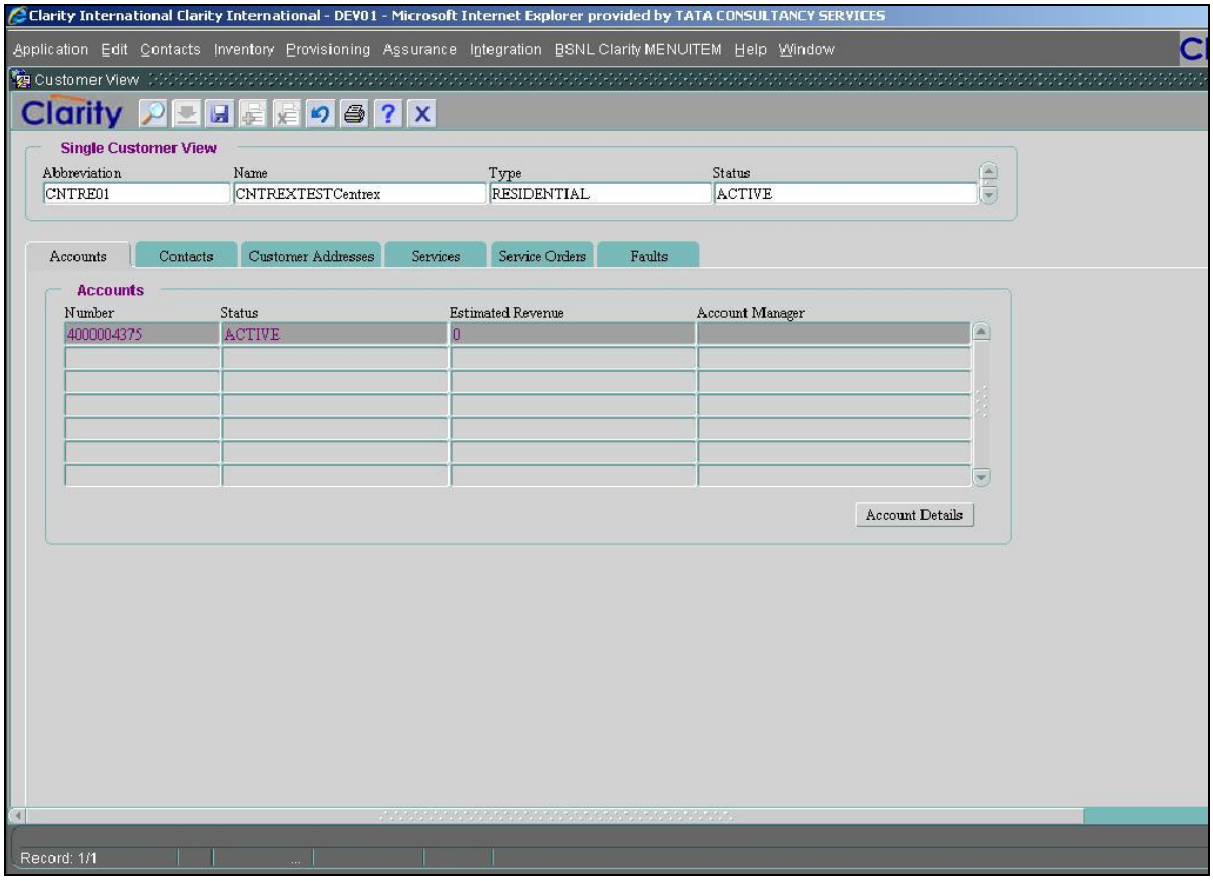

Figure 37: Customer View

4.5.1 Accounts

The Accounts tab of the Customer View screen displays all the accounts available for the customer.

The task that can be performed using this screen is:

Viewing customer account details

To navigate to Accounts:

1. Click **Contacts** on the Clarity homepage**.** A dropdown list appears.
2. Select **Query ➔ Customer View.** The Customer View screen appears, with Accounts highlighted as the default tab.

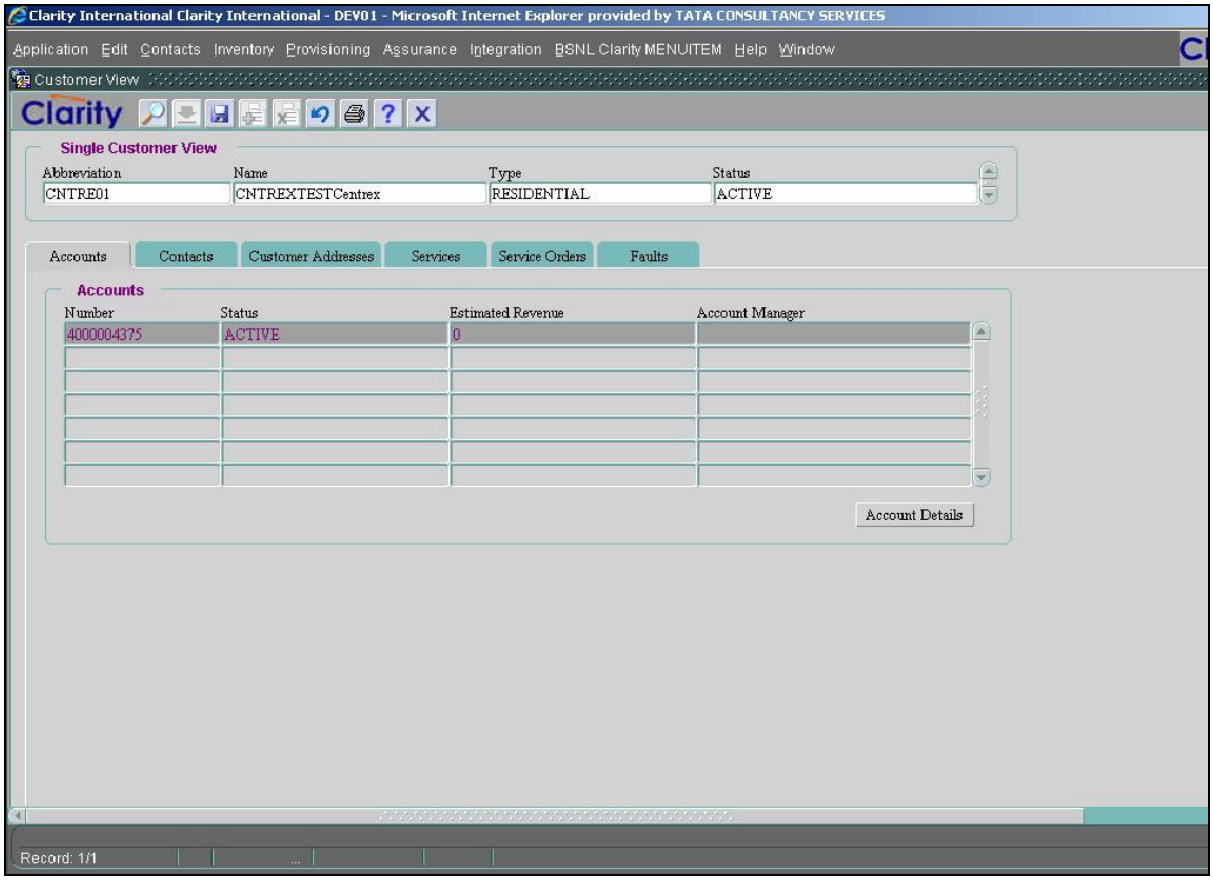

Figure 38: Accounts

Field References

The field names and description of all the fields that appear in the Accounts tab are given below:

Table 30: Field References for Accounts

Field Name	Field Description
Single Customer View	
Abbreviation#	This field contains the unique customer abbreviation given to every customer
Name#	This field contains the name of the customer
Type	This field describes the type of customer. For example, Residential or Corporate
Status	This field reflects the current status of the customer. For example, Active
Accounts	
Number	This is a unique identification number for the customer. It contains the Pan India Account number which gets populated from CRM **Note**: Double click this field to display the

<table>
<tr><th>Field Name</th><th colspan="2">Field Description</th></tr>
<tr><td></td><td colspan="2">account details in the Accounts tab.</td></tr>
<tr><td>Status</td><td colspan="2">The current status of the account. For example, Active</td></tr>
<tr><td>Estimated Revenue</td><td colspan="2">This field is not used</td></tr>
<tr><td>Account Manager</td><td colspan="2">Name of the account manager responsible for this account</td></tr>
<tr><td rowspan="12">Account Details</td><td colspan="2">Click this button to view the Customer Accounts screen

Note: Customer Accounts ➔ Accounts contains the following fields. The Customers tab is not used.</td></tr>
<tr><td colspan="2">Customer Accounts ➔ Accounts ➔ Accounts</td></tr>
<tr><td>Account Number</td><td>The unique identification number of an account</td></tr>
<tr><td>Status</td><td>The status of the customer For example, Active</td></tr>
<tr><td>Account Manager</td><td>Name of the account manager resposible for this account</td></tr>
<tr><td>Sales Channel</td><td>This field is not used</td></tr>
<tr><td>Est Revenue</td><td>The estimated revenue if an account is sales-oriented</td></tr>
<tr><td>Address</td><td>The address of the customer</td></tr>
<tr><td colspan="2">Customer Accounts ➔ Accounts ➔ Contact Points</td></tr>
<tr><td>Contact Type</td><td>The preferred mode of communication with the customer. For example, Mobile</td></tr>
<tr><td>Contact Number</td><td>The contact number of a customer</td></tr>
<tr><td>Contact Hours</td><td>A convenient time to contact the customer</td></tr>
</table>

Field Name	Field Description	
	Availability	The availability of the contact person. For example, Morning or Evening
	Customer Accounts ➔ Accounts ➔ Contact Person	
	Name	The name of the contact person
	Description	The designation of the contact person
	Customer Accounts ➔ Alias	
	Domain	The domain of the contact person
	Alias	The alias name of the contact person

#The name and abbreviation combination will be unique for every customer.

Note: The **Single Customer View** section is common for Accounts, Contacts, Customer Addresses, Services, Service Orders and Faults.

Viewing Customer Account Details

To view customer accounts:

1. Navigate to the **Accounts** tab.
2. Click **Query.** The screen enters query mode.
3. Enter the search criteria in the **Single Customer View** section.

   Note: Though information can be entered in any of the fields in this section, entering in all the fields will help narrow down the search.
4. Click **Query**. Details corresponding to the search criteria appear in the Accounts section.
5. Select the relevant row to view further information about an account.
6. Click **Account Details**. The Customer Accounts screen appears, with the Accounts tab highlighted.

   Note: The Customers tab is used only by the admin user.

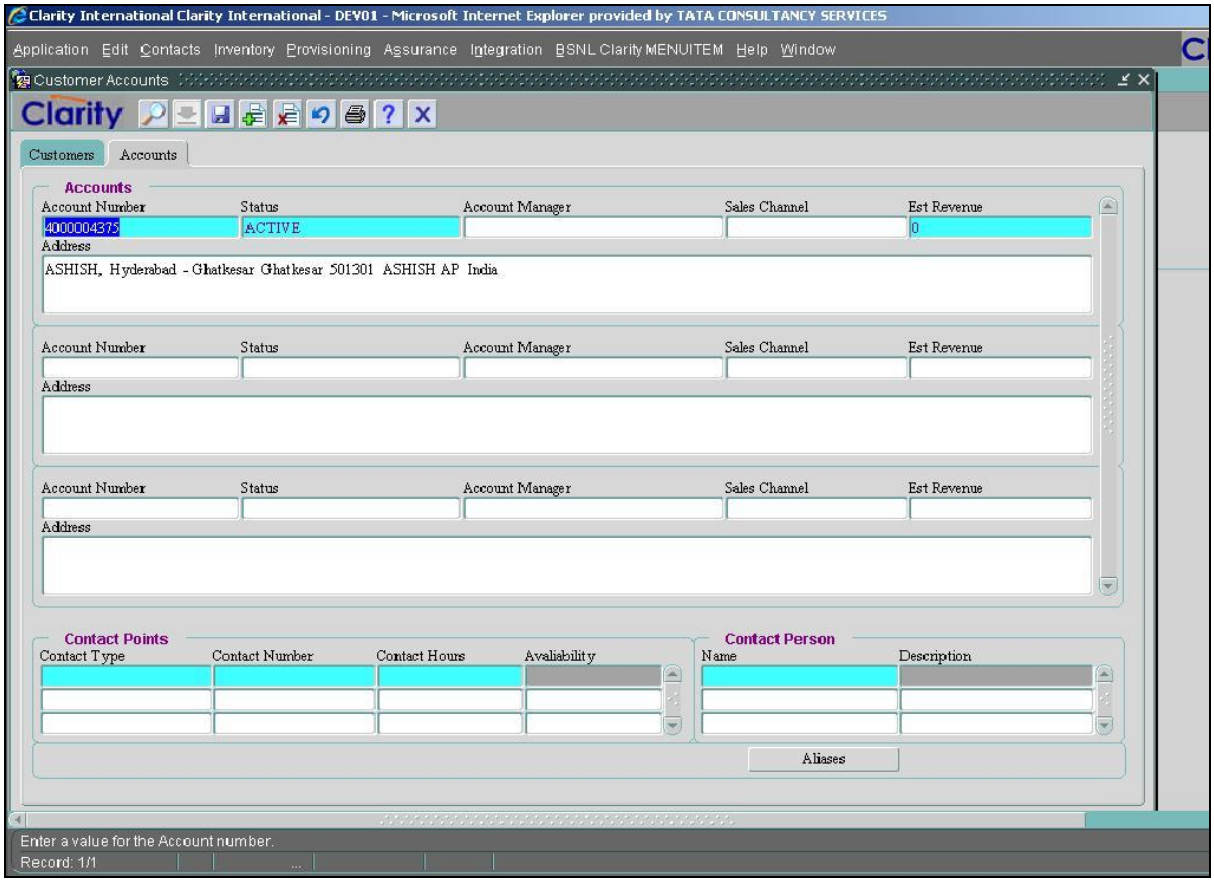

Figure 39: Customer Accounts

4.5.2 Services

The Services tab of the Customer View screen displays all the services associated with the customer.

The task that can be performed using this screen is:

Viewing services provided

To navigate to Services:

1. Click **Contacts** on the Clarity homepage. A dropdown list appears.
2. Select **Query ➔ Customer View.** The Customer View screen appears.
3. Click **Services.** The Services tab is highlighted.

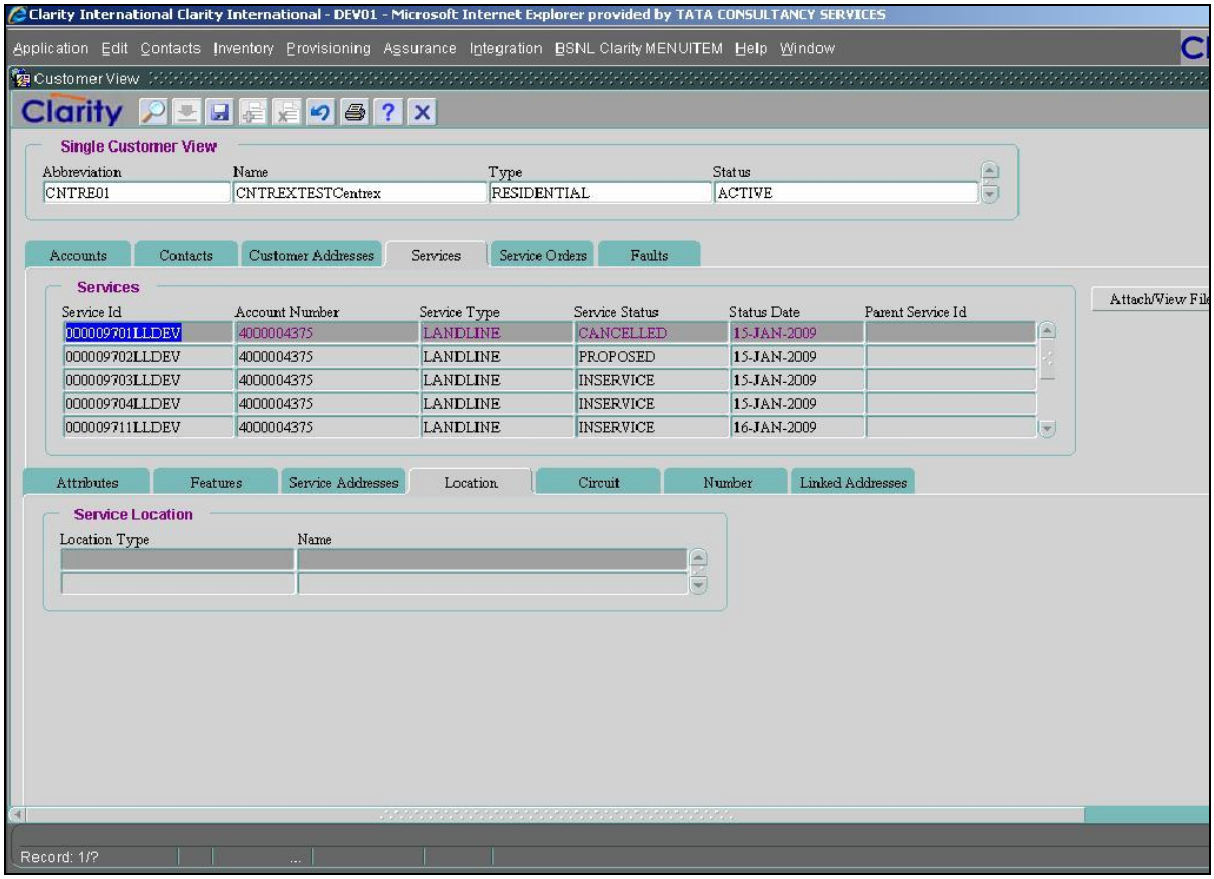

Figure 40: Services

Field References

The field names and description of all the fields that appear in the Services tab are given below:

Table 31: Field References for Services

Field Name	Field Description	
Services		
Service Id	The unique number associated with the customer's service	
Account Number	The account number the service is provisioned for	
Service Type	The type of service that is provisioned. For example, Landline	
Service Status	The status of the service. For Example, Proposed, Closed	
Status Date	The date when the service was last modified	
Parent Service Id#	-	
Attach/View File	Clicking this button opens the **File Attachments** screen. This can be used to attach files or view them for service details **Note**: This screen is non-editable.	
	File Path	The path where the service order is saved

Field Name	Field Description	
	File Name	Name of the file with which it is saved
	Attach File	Clicking this button takes you to the location where a file is saved
	View File	Clicking this button enables you to view a service order by displaying the file
Services ➔ Attributes		
Service Attributes		
Name	Names of all the attributes configured for the service type	
Value	This field displays the values of the respective attributes	
Services ➔ Features		
Service Features		
Name	Names of all the features configured for the service type	
Feature Type#	-	
Value	Displays the status of the various features of the service type. These can be: • **Y**: Activated • **N:** Not activated • **Null:** Never activated	
Parent Feature Name	If a feature is dependent on another feature for provisioning, then the parent feature name is displayed	
Feature Attributes		
Name	Name of Features Attribute configured for the feature of service type. For example, Provisioned	
Value	This field displays the values of the respective features. These can be: • **Y**: Activated • **N:** Not activated • **Null:** Never activated	
Services ➔Service Addresses		
Service Addresses		

Field Name	Field Description
Addresses Type	Displays the addresses related to the destinations of: • Site A: Usually the telco's location • Site B: Usually the customer's permises destinations Example: AEND, BEND
Address	Displays the complete address, appending all the address lines
Services ➔ Location	
Location	
Location Type	The Type of location of a selected customer. For example, AEND, BEND **Note**: This is the location type selected while identifying a pillar.
Name	Names of locations for a selected customer
Services ➔ Circuit	
Circuit	
Name	Names of the circuit (facilities) associated the service
Inservice Date	The date when the circuit status was changed to In Service
Speed	Displays the speed or capacity of the circuit
Status	The current status of the circuit
Comment	Circuit related comments are displayed if available
Circuit ➔ Other Names	
Other Names	
Name	Displays general referred legacy names, that is, Alternate Names
Type	A reference to the alternate name. For example, Legacy Name
Circuit ➔ Circuit Detail Instance	
Circuit Detail Instance	
Name	The name of the circuit detail instance
Value	The value of the circuit detail instance
Services ➔ Number	
Numbers	
City Code	The city code associated with the number
Area Code	The area code associated with the numbers. This is not valid for mobile numbers.

Field Name	Field Description
Number	Displays the phone number associated with the service
Number Type	Displays the number type associated with the service
Status	Displays the status of the number
Status Change Date	Displays the date when status was changed
Services ➔Linked Addresses[#]	
Linked Addresses	
Suite	Name of the suite in which the customer's office or residence is located
Level	Floor on which the customer's office or residence is located
No	Street number of customer's office or residence
Street Name	Street name of customer's office or residence
Suburb	Name of the suburb in which the customer's office or residence is located
City	Name of the city in which the customer's office or residence is located
State	Name of the state in which the customer's office or residence is located
Post Code	Postcode of the customer's office or residential addresses mentioned
Country	Name of the country in which the customer's office or residence is located

Fields and sections marked with [#] are not used.

Viewing Services

To attach or view file details:

1. Navigate to the **Services** tab.
2. Click **Query.** The screen enters query mode.
3. Enter the search criteria in the **Single Customer View** section.

   Note: Though information can be entered in any of the fields in this section, entering in all the fields will help narrow down the search.
4. Click **Query**. Details corresponding to the search criteria appear in the services section.

   Note: The Attach/View button is not used.

4.5.3 Service Orders

The Service Orders tab of the Customer View screen displays the service orders associated with the customer, which are InProgress. This refers to the service orders that have been initiated but are Proposed.

The task that can be performed using this screen is:

Viewing customer service orders

To navigate to Service Orders:

1. Click **Contacts** on the Clarity homepage. A dropdown list appears.
2. Select **Query ➔ Customer View**. The Customer View screen appears.
3. Click **Service Orders**. The Service Orders tab is highlighted.

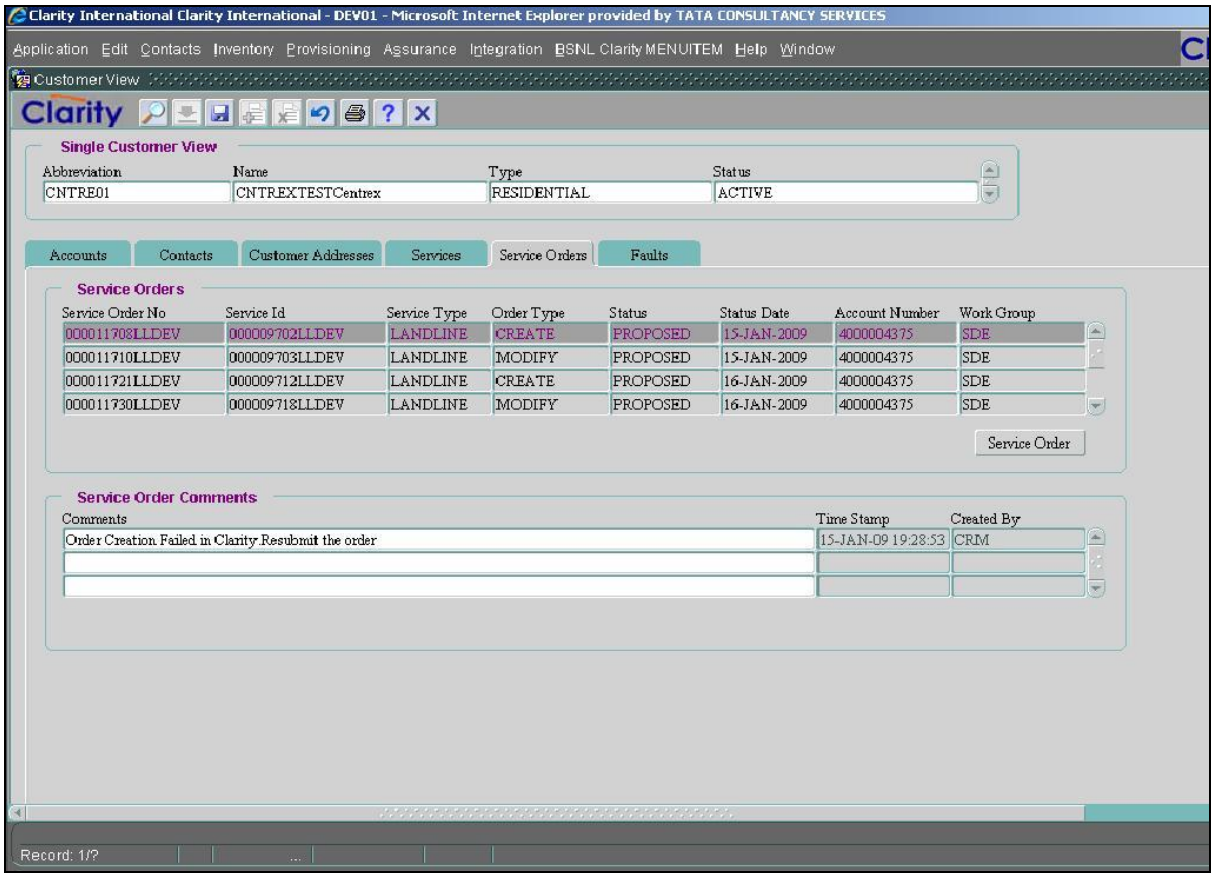

Figure 41: Service Orders

Field References

The field names and description of all the fields that appear in the Service Orders tab are given below:

Table 32: Field References for Service Orders

Field Name	Field Description
Service Orders	

Field Name	Field Description
Service Order No	The unique ID associated with the service order
Service Id	The unique number associated with the customer's service
Service Type	The service type associated with the service
Order Type	The transaction type of the service order
Status	The current status of the service order. For example, Proposed and Closed
Status Date	The date when the service order was last modified
Account Number	The account number the service was provisioned for
Work Group	The work group responsible for the service order
Service Order	Clicking this button displays all the tasks under a selected service order
Service Order Comments	
Comments	This is an alpha-numeric field to enter comments associated with the service order
Time Stamp	The time when the comments were entered
Created By	The name of the user who entered the comments

Viewing Customer Service Orders

To view customer service orders:

1. Navigate to the **Service Orders** tab.
2. Click **Query.** The screen enters query mode.
3. Enter the search criteria in the **Single Customer View** section.

   Note: Though information can be entered in any of the fields in this section, entering in all the fields will help narrow down the search.
4. Click **Query**. Details corresponding to the search criteria appear in the service orders section.
5. Click **Service Order** to view the details of the selected service order. The Service Orders screen appears, containing the relevant details.

5 Provisioning

The Provisioning system is used to create new subscribers. It is also used to provide facilities like STD, ISD, call waiting and call forwarding to new and existing customers.

This system receives requests from Order Management to activate or deactivate these facilities.Once the request is received, the Provisioning system delivers it to the Network Elements. Finally, the subscription and services (facilities) are activated.

The screens described in this section are:

- SOP Queue Edit
- SOP Queue Work Flow Management

5.1 SOP Queue Edit

The SOP Queue Edit screen is used to view and modify service order provisioning commands.

For example, if the command is executed successfully, then the status is updated to COMPLETED. An ERROR message in the Status field indicates there is an error and its details are displayed. Once corrected, the status can be changed to ACTION. This will then be resubmitted to the Mediation Device Driver (MDD).

Tasks that can be performed using this screen are:

- Viewing the SOP Commands Status, Remarks and Input Data
- Viewing and modifying the SOP Commands Status
- Viewing Input Parameters and Values using the Request Data tab

To navigate to the SOP Queue Edit screen:

1. Click **Provisioning** on the Clarity home page. A dropdown list appears.
2. Select **SOP Edit**. The Sop Queue Edit screen appears.

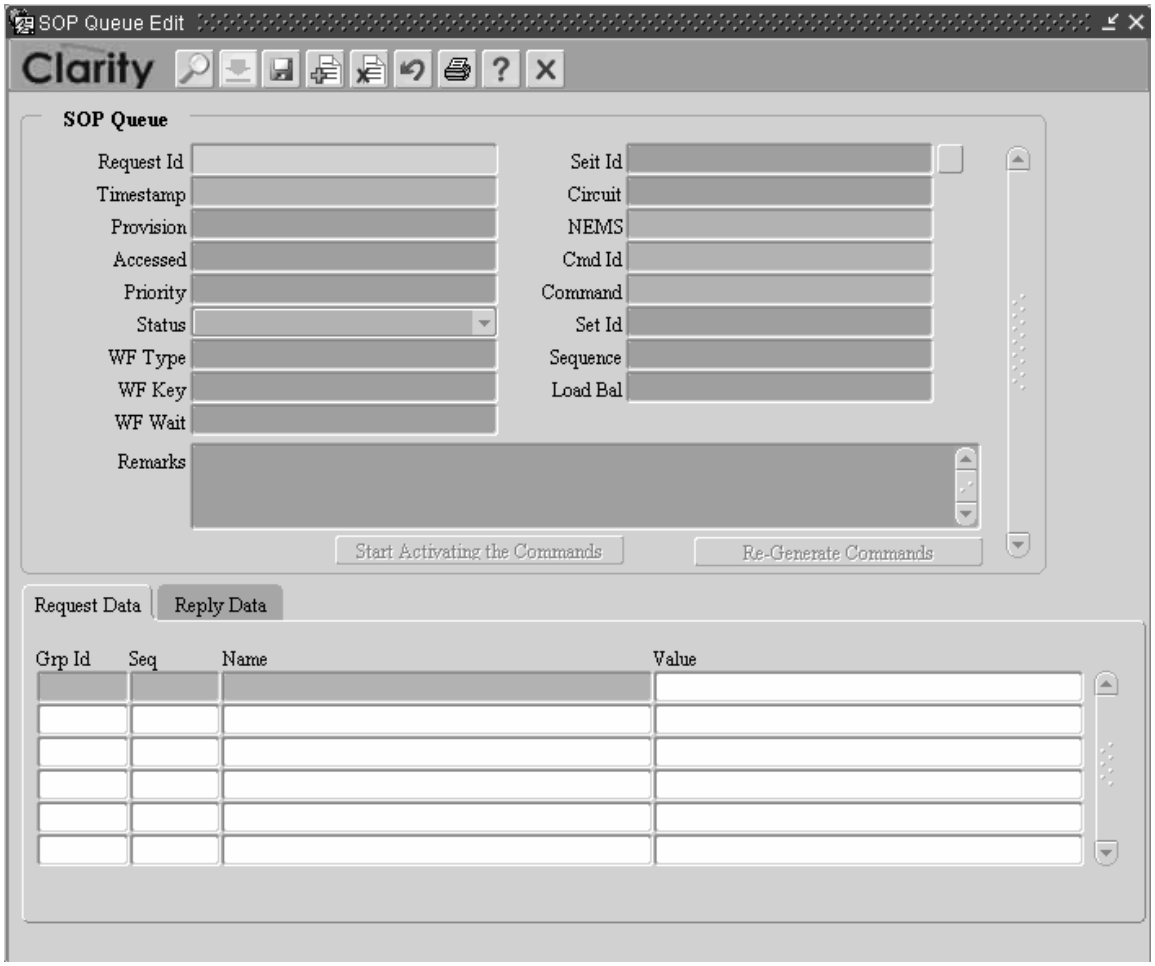

Figure 42: SOP Queue Edit

Field References

The field names and description of all the fields that appear in the SOP Queue Edit screen are given below:

Table 33: Field References for SOP Queue Edit

Field Name	Field Description
SOP Queue Edit	
Request Id	A numeric field, it is the unique ID for the SOP Queue request
Timestamp	This is an auto-generated field that records the date and time at which the command was placed in the queue
Provision	This is an auto-generated field that displays the time and date at which the command was executed by the MDD
Accessed	This is an auto-generated field that records the date and time at which the command was accessed by the MDD
Priority	This field displays the request priority
Status	A dropdown list, it displays the current status of the command

Field Name	Field Description
WF Type#	-
WF Key#	-
WF Wait#	-
Remarks	An auto-populated field, it contains details related to the status of the SOP queue
Seit Id	A mandatory and unique field, it is the Service implementation task identifier
Circuit#	-
NEMS	The Network Element Management System, it contains the name of the switch
Cmd Id	The SOP command identifier
Command	The SOP command name
Set Id	This field is a unique indoor ID for every service order. It is the SOP command set identifier
Sequence	This field reflects the sequence of this command within the set
Load Bal#	-
Request Data	
Grp Id	This is the system generated group identifier
Seq	This field displays the sequence of the SOP action command within the command set
Name	This field contains the input parameter
Value	This field contains the value of the input parameter
Reply Data	
Name#	System generated with a reply parameter from the MDD
Value#	The reply parameter value

Fields marked with # are non-editable.

5.1.1 Viewing Status of Commands

To view the status of a command:

1. Navigate to **Clarity ➔ Provisioning ➔ Service Orders**. The Service Orders screen appears.
2. Click **Query.** The screen enters Query mode.
3. Enter the Service Order number in the **Service Order No** field and click **Query**. A list of tasks appears.

Note: If the status of the Indoor task is completed, the **View Command** button will be enabled.

4. Click **View Command**. The SOP Queue Edit screen appears, mentioning the status of the command.

5.1.2 Viewing and Modifying Status of Commands

To view and modify the status of commands:

1. Navigate to the **SOP Queue Edit** screen.
2. Click **Query**. The screen enters Query mode.
3. Enter the Seit ID in the **Seit Id** field and click **Query**. You can now view and modify the status of the command.

5.1.3 Viewing Input Parameters and Values using Request Data

Prerequisites to proceed: To view details under Request Data, the input parameter values should be defined in the Service Orders screen.

Once the request is entered into SOP Queue, Request Data displays all the input parameters names and their values corresponding to the request.

Note: This tab can only be used to view all the input parameters and their values.

The Request Data tab is used for viewing the input parameter values.

To display all the input parameters names and their values corresponding to the request:

1. Navigate to the **SOP Queue Edit** screen**.** The Request Data tab is highlighted by default.

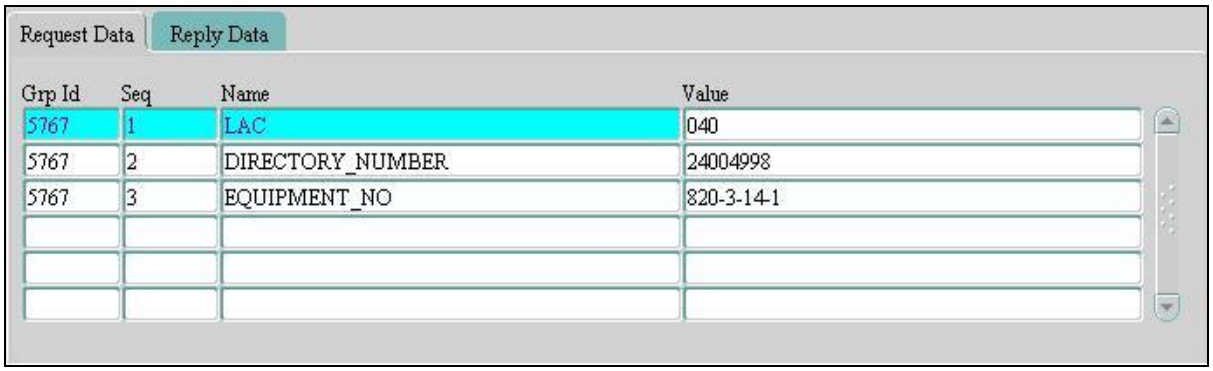

Figure 43: Request Data

2. Click **Query**. The screen enters Query mode.
3. Query the Request Data by entering the ID in the **Seit Id** field, under the SOP Queue section.
4. Click **Query**.The fields in the SOP Queue and Request Data sections are populated.

Note:

i. The Request Data section is populated with the details for the respective Request Ids.

ii. Double click **Query** to view all the Request Ids.

5.2 SOP Queue Work Flow Management

The SOP Queue Work Flow Management screen is used to view the progress of service order provisioning requests based on the current status of the command. You can also select a record and open it in the SOP Queue Edit screen for modification.

Tasks that can be performed using this screen are:

Displaying (or viewing) the service order provisioning requests based on the current status of the command.

To navigate to the SOP Queue Work Flow Management screen:

1. Click **Provisioning** on the Clarity homepage. A dropdown list appears.
2. Select **Query ➔ Auto Provisioning Queue**. The SOP Queue Work Flow Management screen appears.

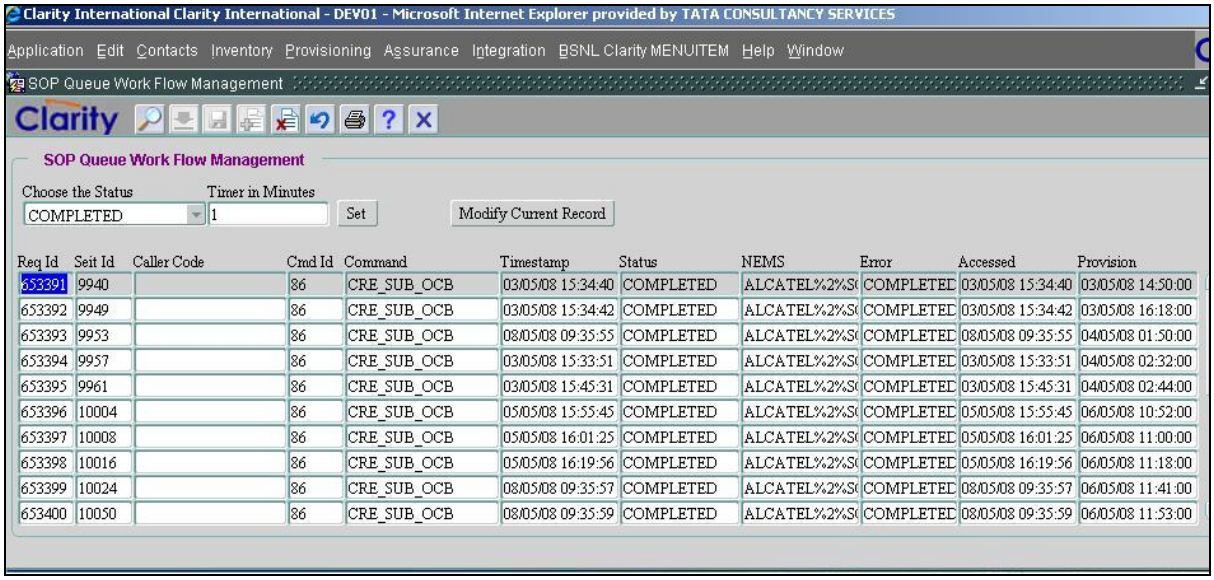

Figure 44: SOP Queue Work Flow Management

Field References

The field names and description of all the fields in the SOP Queue Work Flow Management are given below:

Table 34: Field References for SOP Queue Work Flow Management

Field Name	Field Description
Choose the Status	This is a mandatory dropdown list, used to select a command status.Options include statuses like Hold, Action, Read, Send and so on
Timer in Minutes	Determines how frequently the database re-queries SOP workflow records
Set	Click this button to save the value entered in Timer in Minutes
Modify Current Record	Click this button to modify the selected record in the SOP Queue Edit screen
Req Id	The SOP queue request identifier
Seit Id	The service implementation task identifier
Caller Code	The telephone number that is used as the service identifier
Cmd Id	The SOP command identifier
Command	The SOP command name
Timestamp	The date and time that the command was placed in the queue
Status	The current status of the command request
NEMS	The Network Element Management System
Error	The error message generated from the NEMS
Accessed	The time and date on which the command was accessed by the MDD
Provision	The time and date on which the command was actioned by the MDD

5.2.1 Displaying Service Order Provisioning Requests

To display or view a service order provisioning request based on the current status of the command:

1. Navigate to the **SOP Queue Work Flow Management** screen.
2. Select a status from the **Choose the Status** dropdown list.
3. Click **Set**. The Service Order Provisioning request appears.

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