

SYNAPSE Server Setup Script

1.1 Scope

This section is designed to explain the SYNAPSE Server Setup Script; this script is the **only supported** method for installing the SYNAPSE Software. The SYNAPSE Service Manual does not go over all the hidden configurations that the Server Setup Script performs. As the installer reads along they will find three main sections to this chapter **Describing The Installation Option**, (this segment will go over the different options for installing a SYNAPSE server), **Using the SYNAPSE Server setup Script**, (which is an explanation of a Database Server installation) and the **Installation Check List** (this segment will be used as a validate tool and as a remind for some configurations).

1.2 Document History

Version	Description	Date
1.0	This document was created to explain the new installation script	11/28/00
1.1	Updated for SYNAPSE 2.0 using server Setup Functionality chart for 2.0	04/24/01
1.2	Updated for SYNAPSE 2.0.1	05/08/01
1.3	Updated for manual changes with Installation Script assistance	07/09/01
1.4	Updated for SYNAPSE 2.1 as of 10/17/01 Server Setup Functionality Chart	10/31/01
2.0	Updated to support NT & 2000 Server OS, removed most screen shots because of maintains issues	07/16/02
2.1	Updated to support 2000 Cluster configuration	08/08/02

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1.4 Dependencies

Please refer to the Software Release Specification document.

1.5 Describing The Installation Options

SYNAPSE Server Setup Script is the **only** supported process for installing the SYNAPSE PACS environment. There are some configurations / settings that this script performs that is not described within this manual.

1.5.1 Installation Options

There are many different options for installing the SYNAPSE Product; bellow is a brief description of the type of servers the ServerSetup can perform.

NT Server Options

Server Type	SYNAPSE Server	Workstation_Server Combo	Storage Server
Primary Domain Controller (PDC)	✓	✓	X
Backup Domain Controller (BDC)	✓	X	✓
Member Server	✓	✓	✓
NT Workstation	X	✓	X

1. SYNAPSE Server – Has the following components and their associated default configurations.
 - a. Security settings
 - b. Storage locations for Images, Notes, Reports, Annotation and Documents
 - c. FOOD (database)
 - d. Code Base (IIS Configuration)
 - e. DicomServer
 - f. Fuji DB Utility
 - g. Fuji RDS
 - h. Microsoft Data Access (MDAC)
 - i. SYNAPSE PreCache Server
2. Workstation Server Combo – Has the following components and their associated default configurations.
 - a. Security settings
 - b. Storage locations for Images, Notes, Reports, Annotation and Documents
 - c. FOOD (database)
 - d. Study Deletion
 - e. Code Base (IIS Configuration)
 - f. Workstation
 - g. DicomServer
 - h. Fuji DB Utility
 - i. Fuji RDS
 - j. Microsoft Data Access (MDAC)
3. Storage Server – Has the following components and their associated default configurations.
 - a. Security settings
 - b. Gives the storage locations options for Images, Notes, Reports, Documents
 - c. IIS Configuration (Storage Information)
 - d. DicomServer
 - e. FujiRDS
 - f. SYNAPSE PreCache Server

SYNAPSE Components (New Installations)

<i>Installed Components & Functions</i>	<i>Workstation_Server Combo</i>	<i>SYNAPSE Server</i>	<i>Storage Server</i>
Remove all previous code downloads	✓	✓	✓
Software copy and path setup	✓	✓	X
Preliminary Notes	✓	✓	X
SYNAPSE PACS, User Admin			
SYNAPSE Service User Accounts	✓	✓	*
SYNAPSE Default System User Accounts	✓	✓	✓
SYNAPSE Users Group	✓	✓	X
Radiology User Groups	#	#	X
SYNAPSE NT Security for Partitions, Directories & Shares			
Required Directories & Shares	✓	✓	✓
Registry Changes	✓	✓	X
Security Settings for Required Directories & Shares	✓	✓	✓
SYNAPSE Service Guide, Windows NT Option Pack & Intranet Information Service			
IIS Setup for Notes & Cache Control	#	#	#
IIS Virtual Directories & Home directories	✓	✓	✓
SYNAPSE Installation Tool			
Creating the FOOD Database	✓	✓	X
Study Deletion	✓	X	X
Recycle Bin configuration	#	X	X
SYNAPSE Backup_Tool	X	✓	X
SYNAPSE Workstation Download	✓	X	X
SYNAPSE DicomServer Installation & Configuration			
Code Download of DicomServer	✓	✓	✓
ODBC Setting	✓	✓	✓
DicomServer Service Startup Settings	✓	✓	✓
SYNAPSE DBUtility	✓	✓	X
SYNAPSE RDS	✓	✓	✓
SYNAPSE Precache Server	X	✓	✓
Microsoft Data Access	✓	✓	✓

Key:

✓ - Lets the installer know that the Installation Script will complete the Installed Components & Functions.

X – Lets the installer know that the Installation Script will NOT complete the Installed Components & Functions.

- Lets the installer know that this option is to be manually created or configured (refer to the proper section within the service manual for more details).

* - Lets the installer know that only the DicomServer user will be created.

Manual – Lets the installer know that a manual input will be needed to complete the section

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SYNAPSE Components (Upgrading Options)

<i>Installed Components & Functions</i>	<i>Workstation_Server Combo</i>	<i>Database Server / Test Server</i>	<i>Storage Server</i>
Remove all previous code downloads	✓	✓	✓
Software copy and path setup	✓	✓	X
Preliminary Notes	✓	✓	X
SYNAPSE PACS, User Admin			
SYNAPSE Service User Accounts	*	*	*
SYNAPSE Default System User Accounts	*	*	X
SYNAPSE Users Group	*	*	*
Radiology User Groups	X	X	X
SYNAPSE NT Security for Partitions, Directories & Shares			
Required Directories & Shares	*	*	*
Registry Changes	✓	✓	X
SYNAPSE Service Guide, Windows NT Option Pack & Intranet Information Service			
IIS Setup for Notes & Cache Control	#	#	#
IIS Virtual Directories & Home directories	✓	✓	✓
SYNAPSE Installation Tool			
Creating the FOOD Database	X	X	X
Study Deletion	*	X	X
Recycle Bin configuration	*	X	X
SYNAPSE Backup Tool	X	✓	X
SYNAPSE Workstation Download	✓	X	X
SYNAPSE DicomServer Installation & Configuration			
Code Download of DicomServer	✓	✓	✓
ODBC Setting	✓	✓	✓
DicomServer Service Startup Settings	✓	✓	✓
SYNAPSE DBUtility	✓	✓	X
SYNAPSE RDS	✓	✓	✓
SYNAPSE Precache Server	X	✓	✓
Microsoft Data Access	✓	✓	✓

Key:b

✓ - Lets the installer know that the Installation Script will complete the Installed Components & Functions. For Upgrade segment this also means that the software will be updated.

X – Lets the installer know that the Installation Script will NOT complete the Installed Components & Functions.

- Lets the installer know that this option is to be manually created or configured (refer to the proper section within the service manual for more details).

* - Does not create if this already exists.

2000 Server Options

Server Type	SYNAPS E Server	Workstation_Server Combo	Storage Server	HIIS	2000 Cluster
Domain Controller (DC)	✓	✓	X	✓	✓
Member Server	✓	✓	✓	✓	✓
2000 Professional	X	✓	X	X	X

1. SYNAPSE Server – Has the following components and their associated default configurations.
 - a. Security settings
 - b. Storage locations for Images, Notes, Reports, Annotation and Documents
 - c. FOOD (database)
 - d. Code Base (IIS Configuration)
 - e. HIIS Server
 - f. DicomServer
 - g. Fuji DB Utility
 - h. Fuji RDS
 - i. Microsoft Data Access (MDAC)
 - j. SYNAPSE PreCache Server
2. Workstation Server Combo – Has the following components and their associated default configurations.
 - a. Security settings
 - b. Storage locations for Images, Notes, Reports, Annotation and Documents
 - c. FOOD (database)
 - d. Study Deletion
 - e. Code Base (IIS Configuration)
 - f. Workstation
 - g. DicomServer
 - h. Fuji DB Utility
 - i. Fuji RDS
 - j. Microsoft Data Access (MDAC)
3. Storage Server – Has the following components and their associated default configurations.
 - a. Security settings
 - b. Gives the storage locations options for Images, Notes, Reports, Documents
 - c. IIS Configuration (Storage Information)
 - d. DicomServer
 - e. FujiRDS
 - f. Microsoft Data Access (MDAC)
 - g. SYNAPSE PreCache Server
4. HIIS Server – Has on the following component and its associated default configurations
 - a. Security settings
 - b. HIIS Server

SYNAPSE Components (New Installations)

<i>Installed Components & Functions</i>	<i>Workstation_Server Combo</i>	<i>SYNAPSE Server</i>	<i>Storage Server</i>	<i>HIIS</i>	<i>2000 Cluster</i>
Remove all previous code downloads	#	#	#	X	#
Software copy and path setup	✓	✓	X	X	✓
Preliminary Notes	✓	✓	X	X	✓
SYNAPSE PACS, User Admin					
SYNAPSE Service User Accounts	✓	✓	*	✓	✓
SYNAPSE Default System User Accounts	✓	✓	X	X	✓
SYNAPSE Users Group	✓	✓	X	X	✓
SYNAPSE Security for Partitions, Directories & Shares					
Required Directories & Shares	✓	✓	✓	X	X
Registry Changes	✓	✓	X	X	X
Security Settings for Required Directories & Shares	✓	✓	✓	X	X
SYNAPSE Service Guide, Windows NT Option Pack & Intranet Information Service					
IIS Setup for Notes & Cache Control	#	#	#	X	#
IIS Virtual Directories & Home directories	✓	✓	✓	X	✓
SYNAPSE Installation Tool					
Creating the FOOD Database	✓	✓	X	X	X
Study Deletion	✓	#	X	X	X
Recycle Bin configuration	#	X	X	X	X
SYNAPSE Backup_Tool	X	✓	X	X	✓
SYNAPSE Workstation Download	✓	X	X	X	X
SYNAPSE DicomServer Installation & Configuration					
Code Download of DicomServer	✓	✓	✓	X	X
ODBC Setting	✓	✓	✓	X	X
DicomServer Service Startup Settings	✓	✓	✓	X	X
SYNAPSE DBUtility	✓	✓	X	X	✓
SYNAPSE RDS	✓	✓	X	✓	✓
SYNAPSE Precache Server	X	✓	✓	X	X
Microsoft Data Access	✓	✓	✓	✓	✓
SYNAPSE HIIS					
HIIS Router	✓	✓	X	✓	X
HIIS Download	✓	✓	X	✓	X
Microsoft XML Parser	✓	✓	X	✓	X

Key:

✓ - Lets the installer know that the Installation Script will complete the Installed Components & Functions, by default if not unselected within the Server Setup Script.

X – Lets the installer know that the Installation Script will NOT complete the Installed Components & Functions.

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- Lets the installer know that this option is to be manually created or configured (refer to the proper section within the service manual for more details).

*** - Lets the installer know that only the DicomServer user will be created.**

SYNAPSE Components (Upgrading Options)

There are no upgrade options to 2.3 or to a 2000 server that the Server Setup Script covers.

1.6 Using the SYNAPSE Installation Script (ServerSetup.exe)

Depending on the Operating System of computer the Installer is installing SYNAPSE on will determine the Options and the version of SYNAPSE being installed.

Note: The installation described bellow demonstrates a SYNAPSE Server being installed under the 2000 Operating System. If installing a different option such as Storage Server the installer may receive different screens.

1.6.1 Dependencies

Please refer to the Software Release Specification document.

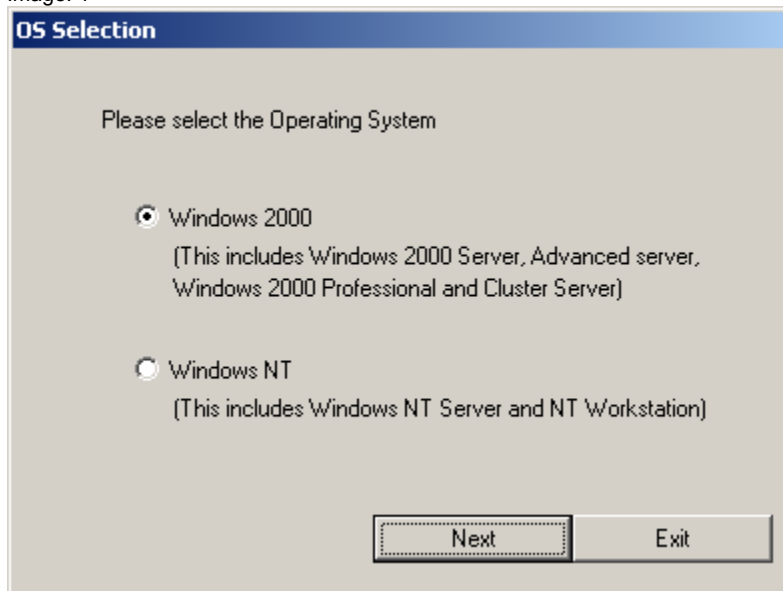
1.6.2 Running the Script

1. From the SYNAPSE Installation CD navigate to the directory of SYNAPSE (**).(**) and run the file ServerSetup.exe.

Note: As the ServerSetup script is running a log file is being created logging the out come of the commands executed by the script. This log file can be found in the Fuji directory in the D drive of the server being installed.

2. Once passed the **Welcome** popup window the installer will be faced with their first option which Operation System they are working with.

Image: 1

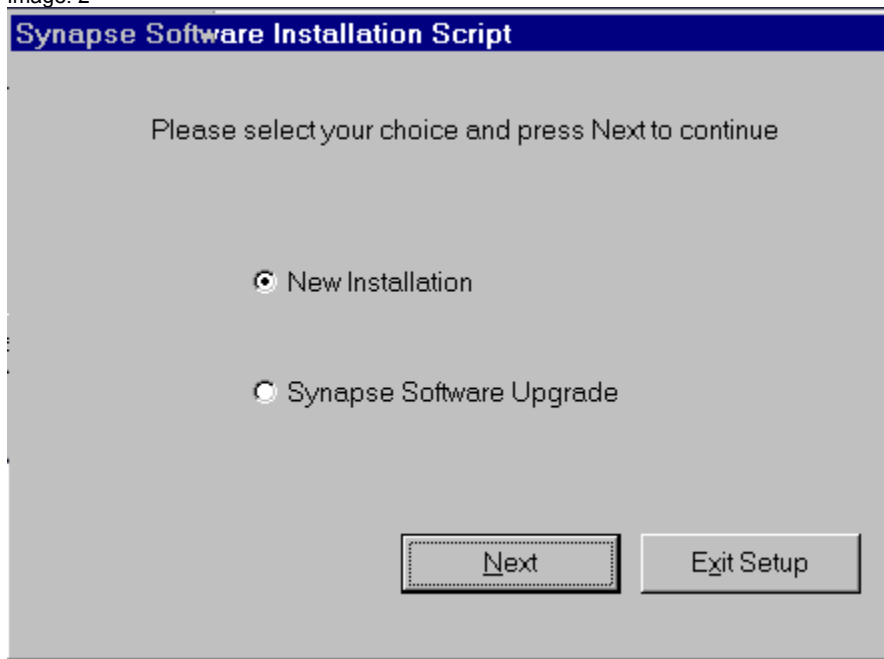


(Continued on next page)

(SYNAPSE Server Setup Script, continued from previous page)

3. Once the Operating System has been selected a series of informational Popup Windows regarding the system will appear.
4. Once past the informational Popup Windows the installer will be asked if he/she would like to perform an upgrade or create a new installation.

Image: 2



(Continued on next page)

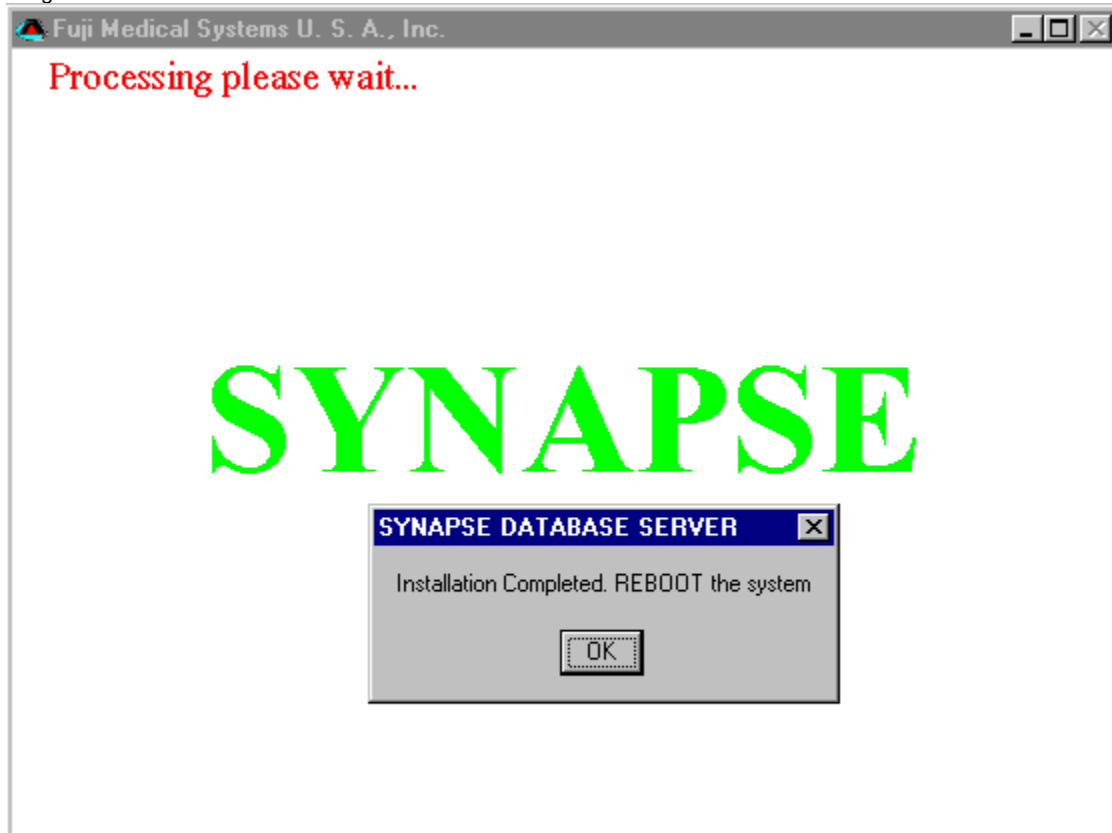
(SYNAPSE Server Setup Script, continued from previous page)

5. Within the next screen the installer will make his or her selection of the type of server to be installed. These selections are described in the **Describing The Installation Options** section above.
4. The next screen, informs the installer about the Prerequisites that need to be completed before stating the SYNAPSE installation. From time to time these prerequisites might not be updated as often as the Software Release Specification document is, the Software Release Specification document is the most updated prerequisite document within the SYNAPSE environment and should be reviewed before starting any installation.
5. The next screen will allow the installer to make changes to the default configurations for the server selection type from step number 3. The installer can add or remove components as they see fit. However, if changes are made to the default configurations these changes must be noted and given to the SYNAPSE Technical Support team.
6. The next set of screens informs the installer about the security changes and the storage location information about Images.
7. After the storage locations and the security changes are complete the next configuration step will be setting up the Intranet Information Server (IIS). As discussed within the SYNAPSE Intranet Information Services chapter there are some changes that need manual settings. These setting will be described to the installer by way of popup windows.
8. The next set of screens informs the installer about some Oracle configuration settings. Please refer to the Oracle chapter for more information.
9. The next set of screens informs the installer about the Database build the information needed to complete the building of the SYNAPSE Database is located in the SYNAPSE Installation Tool Section of this manual.
10. The next screen shot depicts the start of the Code Downloads of the SYNAPES products that were either selected by default or was changed during step number 5 (above). Please follow along within the Service Manual for the products being downloaded for more information and for added configurations.

Note: There can be times when the Code Download of a product did not complete, if this happens close the download page and continue on until the Installation Script is complete. The install will be about to use the SYNAPSEExtra section within the Service Manual to retry the download.

16. The next screen shot depicts the completion of the Installation Script. Please follow the instructions given.

Image: 2



1.7 Installation Check List

1.7.1 Database Server

Table 4

Section & Segment Name	Completed
Pre-Installation	
Site Preparation Checklist	
Pre-SYNAPSE Installation Script	
SYNAPSE Server OS Configuration (Database Server)	
Intranet Information Service	
Oracle Installation & Configuration (Oracle For Database Server)	
Remote Access for Technical Support	
SYNAPSE Installation Script	
Database Server option	
Post SYNAPSE Installation Script	
SYNAPSE Backup Tool (Starting & Initializing the SYNAPSE Backup Tool)	
System Backup Strategy	

1.7.2 Storage Server

Table 5

Section & Segment Name	Completed
Pre-Installation	
Site Preparation Checklist	
Pre-SYNAPSE Installation Script	
SYNAPSE Server OS Configuration (Storage Server)	
Intranet Information Service	
SYNAPSE Oracle Installation & Configuration (Oracle installation For Storage & Non-Database Servers)	
Remote Access for Technical Support	
SYNAPSE Installation Script	
Storage Server option	
Post SYNAPSE Installation Script	
SYNAPSE DicomServer Installation & Configuration (Second DicomServer)	
System Backup Strategy	

1.7.3 Workstation Server Combo

Section & Segment Name	Completed
Pre-Installation	
Site Preparation Checklist	
Pre-SYNAPSE Installation Script	
SYNAPSE Server OS Configuration (Database Server)	
Intranet Information Service	
SYNAPSE Oracle Installation & Configuration (Oracle For Database Server)	
Remote Access for Technical Support	
SYNAPSE Installation Script	
Workstation / Server Combo option	
Post SYNAPSE Installation Script	
SYNAPSE DicomServer Installation & Configuration (Auto Deletion for Workstation / Server Combo)	

1.7.4 Test Server

(There is not option within the Server Setup Script for Test Server however to install a Test Server complete the following)

Section & Segment Name	Completed
Pre-Installation	
Site Preparation Checklist	
Pre-SYNAPSE Installation Script	
SYNAPSE Server OS Configuration (Test Server)	
Intranet Information Service	
SYNAPSE Oracle Installation & Configuration (Oracle For Database Server)	
Remote Access for Technical Support	
SYNAPSE Installation Script	
Database Server option	
Post SYNAPSE Installation Script	
SYNAPSE Backup Tool (Starting & Initializing the SYNAPSE Backup Tool)	
SYNAPSE DicomServer Installation & Configuration (Second DicomServer & Auto Deletion for Workstation / Server Combo)	

(End of section)