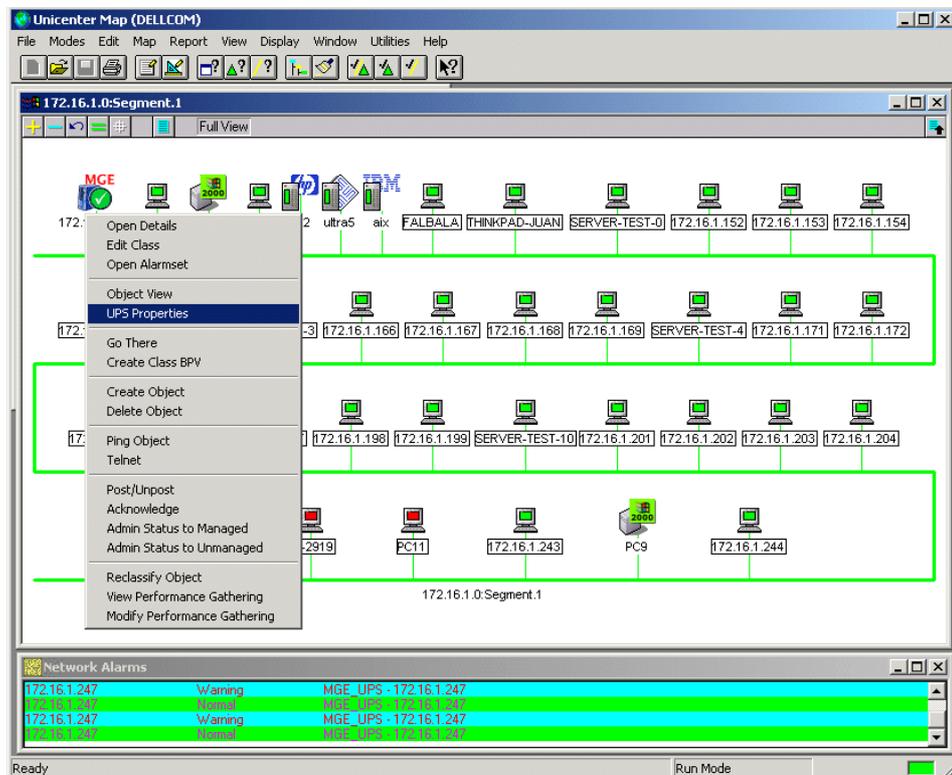


# C.A. Unicenter Integration User's Manual



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## 1 Introduction

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This document describes the stages to integrate and use an EATON UPS with the *Computer Associates Unicenter* Network and Systems Management platform. This document is applicable for *Unicenter* version 3.0.

To use any EATON UPS with this platform, you must have completed the installation and configuration procedures first.

## 2 Installation and configuration procedure

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### 2.1 Installation procedure

1. Execute the "**ca\_unicenter\_integration\_vxx.exe**" InstallShield package. The following actions will be automatically performed:
  - Copy both MIB and Icon files.
  - Compile and load the MIB.
  - Install the UPS class (you have to select the appropriate repository).
  - Load Message Management for Events and Actions.
  - Modify Unicenter configuration files (nodes.dat, ip.atp and gwclass.dat). Original files will be saved with xxx.yyy.eaton extension.
  - Reset the Unicenter DSM after user confirmation. This operation takes several minutes because all Unicenter services need to be restarted. This step is necessary to finalize the package integration.
2. Configure Unicenter security for managing events and actions (described in the following section §2.2).
3. Configure SNMP cards/agents (described in the following section §2.3).
4. Perform auto-discovery to detect UPS SNMP cards/agents.
5. Start the Unicenter Explorer and the Event Management console to detect UPS status changes.

### 2.2 Configure Unicenter security

To manage the UPS icon status, a few commands must be executed from the EM console with the relevant administration rights. EM default settings only authorize the "caunint" user to perform commands.

Follow the instructions below to enable the proper settings:

1. From the command line DOS, execute "caogui settings".
2. Click on the "Event management" major tab and then on the "Client Preferences" minor tab.
3. Change the "Users authorized to issue commands" field to "\*@\*".
4. Save the settings.
5. From the command line DOS, run "unicntrl stop opr" then "unicntrl start opr".

## 2.3 Configure SNMP cards/agents

Each SNMP card or agent must be configured so that the SNMP alarms (Traps) are sent to the Unicenter platform. To do this, the Unicenter host must be declared in the managers' table of each SNMP card and agent. For this configuration, you can use the cards web interface.

For legacy cards (66074, ...), run the Set SNMP Manager.bat script file in *<Unicenter home path>\bin* directory and follow the instructions. During the procedure, you will be asked for:

- The IP address of your SNMP card or agent,
- The IP address of the Unicenter host,
- The read/write community name for the agent (by default "public" if not specified),
- The trap receiver community name (by default "public" if not specified).

Repeat these steps for each SNMP card or agent.

**NOTE:** You also have other possibilities:

1. For SNMP cards, you can use *telnet* configuration menu. You can also use the HTML settings page for the "Manager Table" settings.
2. Use a MIB browser to configure the SNMP cards and agents.

However, we strongly suggest using the script file as these operations require an in-depth knowledge of the SNMP protocol and also a good understanding of our products.

### Configuration example for manager number X:

OID number	Designation / Value
1.3.6.1.4.1.705.1.2.2.1.1.X	Manager number = X.
1.3.6.1.4.1.705.1.2.2.1.2.X	Device number = 0.
1.3.6.1.4.1.705.1.2.2.1.3.X	Manager type = 9 (other).
1.3.6.1.4.1.705.1.2.2.1.4.X	Protocol level = 4 (snmpv1).
1.3.6.1.4.1.705.1.2.2.1.5.X	Manager description = "Unicenter" for example.
1.3.6.1.4.1.705.1.2.2.1.6.X	Manager IP address = YYY.YYY.YYY.YYY format.
1.3.6.1.4.1.705.1.2.2.1.7.X	Community name = "public" for example.
1.3.6.1.4.1.705.1.2.2.1.8.X	Severity level = 2 for example.
1.3.6.1.4.1.705.1.2.2.1.9.X	Acknowledgement type = 2 (mgnoack).

## 3 Uninstalling the agent

From the "Add/Remove programs" item of the control panel, execute "Unicenter UPS Device Integration Package". This script will perform the following actions:

- Stop services.
- Unload the MIB.
- Remove both icon and MIB files.
- Remove the class and objects from World View CORE (select the appropriate repository).
- Remove the Event Message records and actions.
- Restore Unicenter configuration files (nodes.dat, ip.atp and gwclass.dat).
- Reset the Unicenter DSM after user confirmation. This operation takes several minutes because all Unicenter services need to be restarted. This step is necessary to terminate uninstallation.

### Important Notes:

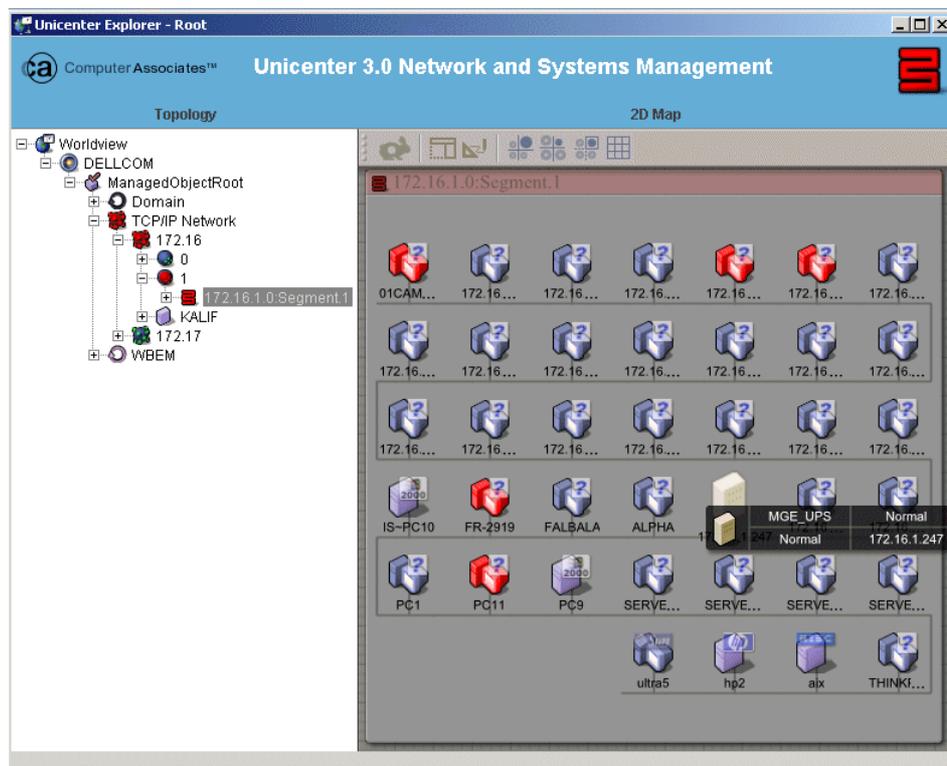
During restoration of the Unicenter configuration files, a backup copy of the current files will be made in their respective directories with the *xxx.eaton* extension. It is recommended to compare each configuration file with its copy and merge modifications after uninstallation. Restoring a file from its saved copy could erase modifications.

## 4 Use

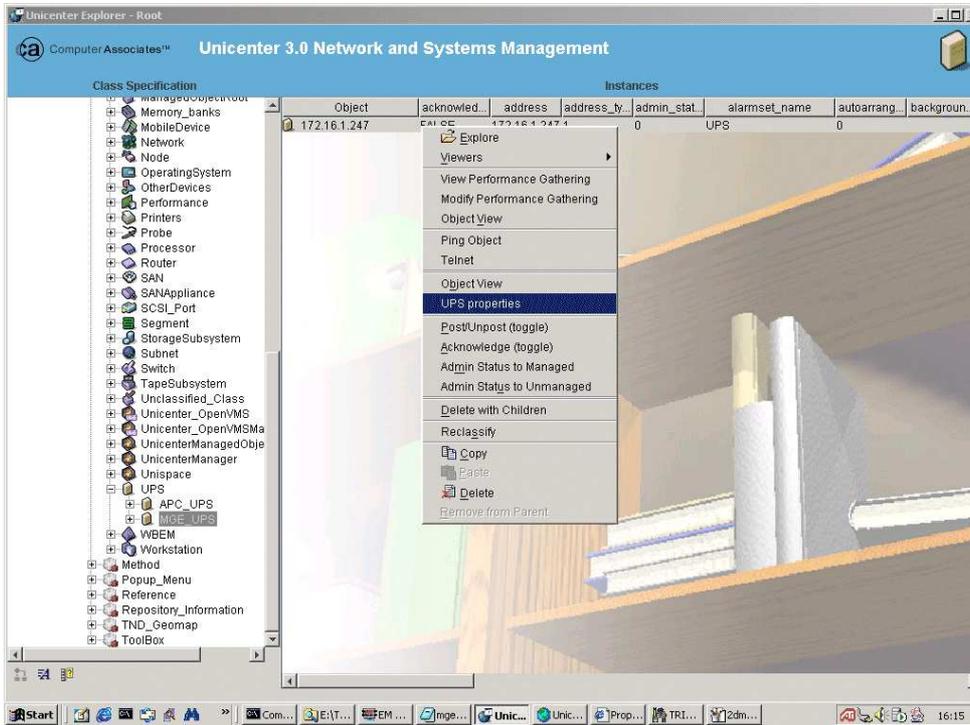
### 4.1 UPS Automatic discovery (Auto-Discovery)

Any EATON Pulsar UPS with a compatible SNMP card or SNMP proxy agent is automatically discovered by Unicenter. Each detected UPS is identified by its IP address. Several maps are available:

- "Unicenter Explorer: Topology" or "Unicenter 2-D map": View any equipment from a network segment.
- "Unicenter Explorer: Class specification": View all the UPS detected on the network.



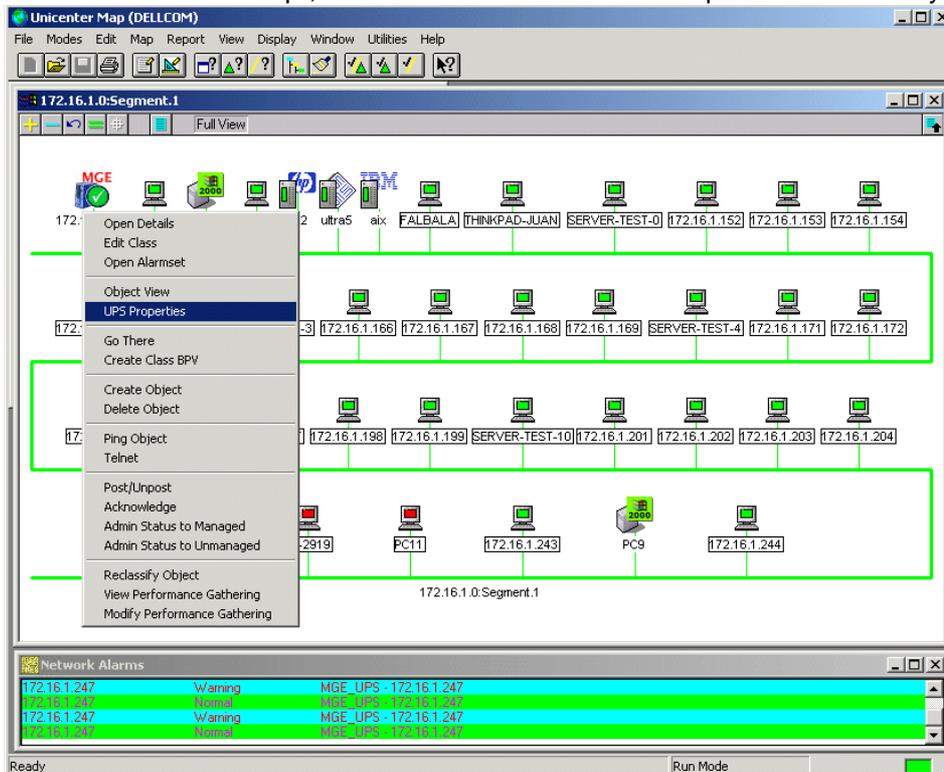
Network segment map containing a UPS.



View the EATON UPS equipment detected on the network (MGE\_UPS Class).

**Note:** MGE\_UPS belong to the UPS Class.

With "Unicenter 2-D map", each UPS is associated with a specific icon for easy network identification.



UPS through "Unicenter 2-D map" view.

## 4.2 Receive and view UPS alarms

The icon is associated with the UPS status (depending on the alarms received)

UPS Status	Unicenter 2-D map	Unicenter Explorer
Normal		
Warning		
Critical		

Using EM Console, you can view the traps received from any equipment. A text message is associated with each trap (alarm or acknowledgement) sent by a UPS. The color depends on the alarm severity:

- Green: Normal status (Alarm Acknowledged)
- Orange: Warning
- Red: Critical

The screenshot shows the EM Console interface with a log of messages. The log table is as follows:

Time	Node	User	Station	Message
16:24:19	UNRESOLVED	DELLCOM\caunint		%CATD_I_060, SNMPTRAP: -c public 705 172.16.1.247 UNRESOLVED 6 17 06:36:05
16:24:19	UNRESOLVED	DELLCOM\caunint		172.16.1.247(UNRESOLVED): Received trap UPS utility power failed: 06/30/03 16:24.
16:24:19	UNRESOLVED	DELLCOM\caunint		/int /min Setstat -R DELLCOM -C MGE_UPS -N 172.16.1.247 Warning
16:24:20	UNRESOLVED	DELLCOM\caunint		%CATD_I_060, SNMPTRAP: -c public 705 172.16.1.247 UNRESOLVED 6 11 06:36:06 0 OID:
16:24:20	UNRESOLVED	DELLCOM\caunint		172.16.1.247(UNRESOLVED): Received trap UPS on Battery: 06/30/03 16:24.
16:24:20	UNRESOLVED	DELLCOM\caunint		/int /min Setstat -R DELLCOM -C MGE_UPS -N 172.16.1.247 Warning
16:24:20	UNRESOLVED	DELLCOM\caunint		%CATD_I_060, SNMPTRAP: -c public 705 172.16.1.247 UNRESOLVED 6 29 06:36:06 0 OID:
16:24:20	UNRESOLVED	DELLCOM\caunint		%CATD_I_060, SNMPTRAP: -c public 705 172.16.1.247 UNRESOLVED 6 29 06:36:06 0 OID:
16:24:20	UNRESOLVED	DELLCOM\caunint		%CATD_I_060, SNMPTRAP: -c public 705 172.16.1.247 UNRESOLVED 6 18 06:36:35
16:24:49	UNRESOLVED	DELLCOM\caunint		172.16.1.247(UNRESOLVED): Received trap UPS utility power restored: 06/30/03 16:24.
16:24:49	UNRESOLVED	DELLCOM\caunint		/int /min Setstat -R DELLCOM -C MGE_UPS -N 172.16.1.247 Normal
16:24:50	UNRESOLVED	DELLCOM\caunint		%CATD_I_060, SNMPTRAP: -c public 705 172.16.1.247 UNRESOLVED 6 12 06:36:36 0 OID:
16:24:50	UNRESOLVED	DELLCOM\caunint		172.16.1.247(UNRESOLVED): Received trap UPS returned from Battery: 06/30/03 16:24.
16:24:50	UNRESOLVED	DELLCOM\caunint		/int /min Setstat -R DELLCOM -C MGE_UPS -N 172.16.1.247 Normal

At the bottom of the console, there is a Command field and a numeric keypad with buttons 1 through 16. The status bar at the bottom right shows 'OFF REM ALIT 16:25:35' and the text 'Traps in'.

EM Console view

**UPS Alarm list:**

Severity	Alarm message
Warning	UPS on Battery UPS utility power failed
Critical	UPS communication failed UPS Battery entering Fault status UPS battery need to be replaced UPS battery reached low condition UPS battery is unavailable UPS has overload condition

**4.3 Launching UPS properties from Unicenter**

For each UPS in all Unicenter views, you are able to access a certain amount of information depending on the type of equipment you have. For cards with an on-board web server, you are able to access the UPS properties Web Page. Select your UPS and "UPS Properties" item with one click.

**EATON**  
Powering Business Worldwide

**Network Management Card**

**UPS Properties** Help

Pulsar M 2200  
Carte 16 Mo

AC Output	
Voltage	231 V
Current	0.2 A
Frequency	50.0 Hz
Load level	0 %
Apparent Power	0.0 kVA
Active Power	0.0 kW

UPS Status: [Dropdown]

Power source :	AC Power
Output load level :	0%
Output :	Master : On Group1 : On Group2 : On

Battery	
Battery load level :	100% Charging
Remaining backup time :	5 h 02 mn 43 s
Battery status :	OK

Last update : 2008/10/08 11:25:28

Running the "UPS properties" from Unicenter.

#### 4.4 EATON equipment and Unicenter compatibility list:

EATON equipment designation	Card/proxy	Protocol	Auto-discovery	Receiving alarms (Traps)	Accessing UPS properties using a browser (HTTP)
Network Management card Minislot SNMP / Web – 66102	Card	SNMP/HTTP	OK	OK	OK
Industrial Network Management card Minislot SNMP / Web – 66103	Card	SNMP/HTTP	OK	OK	OK
Network Management Proxy / XML-@gent (Windows)	Proxy	HTTP	OK (**)	Na	NOK (*)
Transverse card SNMP/Web – 66074	Card	SNMP/HTTP	OK	OK	OK
Minislot card SNMP/Web – 66244	Card	SNMP/HTTP	OK	OK	OK
XML-Web card – 66073	Card	HTTP	OK (**)	Na	OK
SP WAN- UM Agent	Proxy	SNMP	OK (**)	OK	na
SNMP card – 66245	Card	SNMP	OK	OK	na
SNMP card – 66062	Card	SNMP	OK	OK	na

(\*): *Unsupported option. With Network Management Proxy / XML-Agent, the address "http://<IP Address proxy>/eaton/default.htm" giving access to the UPS property page cannot be configured automatically with Unicenter.*

(\*\*): *Not recognised as EATON UPS equipment. Must be added manually. Select your equipment in the console and click on "Reclassify". Select the UPS class under UPS class. Modify the pollset\_name properties of the snmp class: change host to UPS. (From the Unicenter 2D Map, select the UPS icon and through right click select Viewer then Class Editor)*

na: *not applicable.*