

CentreWare™ for Unicenter NSM

User Guide

Version 1.1.6

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Changes are periodically made to this document. Changes, technical inaccuracies, and typographic errors will be corrected in subsequent editions. Technical updates will be included in subsequent editions.

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Table of Contents

INTROUDUCTION

Unicenter NSM 3.1

Key Benefits and Features	7
System Requirements	8
Hardware Requirements	8
Software Requirements	8

Unicenter NSM R11

Key Benefits and Features	30
System Requirements	31
Hardware Requirments	31
Software Requirments	31

Before You Start CentreWare™ for Unicenter NSM	9
For new printers	9
For existing printers	9

How to use this Document 10

For initial installation.....	10
For day-to-day tasks	10

CenterWare for Unicenter NSM Software Installation..... 11

Web Installation.....	11
-----------------------	----

Using CenterWare™ for Unicenter NSM

Unicenter NSM 3.1

Printer Discovery	12
Color-Coded Device Status.....	13
The Xerox Agent.....	14
Xbusiness.exe.....	14

Xupdate.exe.....	14
TrapRegSingle.exe / TrapUnReg Single.exe.....	14
TrapRegviaMenu.exe / TrapUnRegviaMenu.exe.....	14
Unicenter NSM R11	
Printer Discovery	12
Color-Coded Device Status.....	13
The Xerox Agent.....	14
Dynamic Business Process View	34
TrapRegSingle.exe / TrapUnReg Single.exe.....	14
TrapRegviaMenu.exe / TrapUnRegviaMenu.exe	14
Launch of CentreWare™ Internet Services	15
Integration with Xerox CenterWare Web / Xerox Device Manager	15
Configuration.....	15
Launch.....	15
Description of Xerox Agent popup menu	16
Object View.....	16
View Node.....	16
View Agent.....	17
Integration with Enterprise Managers	
Unicenter NSM 3.1	
Integration with Enterprise Managers	22
Event Management	22
Problem Management	23
Integration with Advanced Help desk.....	24
Unicenter NSM R11	
Integration with Enterprise Managers	35
Alert Management	35

Integration with Advanced Help desk 36

Troubleshooting

Unicenter NSM 3.1- Troubleshooting25
Unicenter NSM R11 - Troubleshooting39

Appendix – Xerox Agent Installer / Un-Installer

Unicenter NSM 3.1

Installer 27
Uninstaller 28

Unicenter NSM R11

Installer 27
Uninstaller 28

CA UNICENTER NSM 3.1

Introduction

Xerox CentreWare™ for Unicenter NSM* provides the added identification of several different types of Xerox printers in the general discovery performed by Unicenter NSM.

Once successfully installed, you will be able to see all the discovered Xerox printers under one Unicenter NSM Business Process View. In addition, CentreWare™ for Unicenter NSM provides full integration with Event Management, and the choice to integrate with Problem Management and Advanced Help Desk.

Key Benefits and Features

Feature	Benefits
Printer Discovery	Provides the automatic identification of Xerox printers on your network and presents them with recognizable icons.
Color-Coded Device Status	Automatically changes the color in the printer icon to reflect the printer status.
Access to the printer embedded web server, Internet Services	If your printer contains an embedded web server, you can easily access it through the icon displayed in the Xerox Agent.
Custom Business View	Managing the Xerox printers on your network will be made easier by displaying all the discovered Xerox printers in a single business view.
Full integration with the features of Unicenter NSM	Provides full use of Event management, Problem management and Advanced Help Desk.
Automatic trap registration for all supported Xerox printers	CentreWare™ for Unicenter NSM will determine if the Xerox device supports SNMP traps and will register/deregister devices automatically.

* Unicenter NSM and its options are proprietary software programs belonging to Computer Associates, Inc. (CA) and / or its licensors.

System Requirements

Hardware Requirements

512MB of RAM

50MB of hard disk space

Software Requirements

Following software must be installed on your PC before installing CentreWare™ for Unicenter NSM.

- Microsoft Windows NT 4.0 Server (for x86 Processor Architecture) with Service Pack 6a or higher required.
- Microsoft Windows 2000 Server, with any later maintenance.
- Microsoft Windows 2000 Advanced Server, with any later maintenance.
- Microsoft Windows 2003 Server (32-bit version).
- Microsoft SQL server 6.5 or equivalent.
- Microsoft SNMP Services
- TCP/IP Protocol
- CA Unicenter TND 2.4 or NSM 3.0 with agent services and unicenter manager.
- CA Unicenter NSM Problem Management Module If you intend to use this feature.
- Advanced Help Desk (AHD) server if you intend to use this feature.
- Microsoft Internet Explorer® or Netscape Navigator® versions 4.0 or later, if you wish to access a printer embedded web page.

Before You Start CentreWare™ for Unicenter NSM

For new printers

Unpack and set up your printer with all consumables and optional equipment according to the instructions provided with your printer.

If the printer did not come with the network card installed, install it with the instructions included with the card.

Turn on your printer. If your printer supports it, review the startup page to verify proper operation.

Connect your printer to an active network with appropriate cabling.

Ensure the printer has a valid unique IP address.

For existing printers

If your printer was not previously networked, add the network card and appropriate cabling.

Ensure the printer has a valid unique IP address.

How to use this Document

This document assumes that you have a working knowledge and familiarity with CA Unicenter NSM. Only procedures that differ from the normally expected operation of Unicenter NSM are described.

You may print all or part of this document at any time from your Adobe Acrobat reader by clicking the **File** menu and the selecting **Print**. You may then select a single page, a range of pages, or the entire document for printing.

For initial installation

Read and follow these section

- [CenterWare for Unicenter NSM Software Installation](#)

For day-to-day tasks

Read and follow these sections:

- [Using CenterWare for Unicenter NSM](#)
- [Troubleshooting](#)

CenterWare for Unicenter NSM Software Installation

Web Installation

- The latest available version of CentreWare™ for Unicenter NSM is available from the Xerox web site at www.xerox.com
- After downloading the file to a temporary folder, double click on the icon to extract the files.
- Double click on the file XeroxCentreWareforUnicenterx.x.x.exe..
- Select your language from the first screen.
- The software will begin the installation process. After a few moments, the Install Shield Wizard will load.

Using CenterWare™ for Unicenter NSM

Unicenter NSM provides the discovery of Xerox devices. CentreWare™ for Unicenter NSM has added the identification of different type of Xerox printers to a general discovery performed by Unicenter NSM.

Printer Discovery

The primary discovery identifies the Xerox devices on the network and presents them with general Xerox icons for 2-D and images for 3-D.

Creation of Xerox BusinessView

Afer successful installation of CenterWare for Unicenter NSM, the user will see all the discovered Xerox printers under one Business Process View. It will also display the current status of all the discovered Xerox printers. The name of this business process view is "Xerox Printers".



Xerox Printers

The printers will now be present in the Business Process View as well as the IP Map.

CentreWare™ for Unicenter NSM will automatically add Xerox printers to this view as they are attached to the network and discovered by Unicenter NSM. At start up the program xupdate.exe will be run.

Color-Coded Device Status

Each printer will be denoted by an icon. Each icon will be color-coded to represent the current status of the printer. The color-coded status is provided via the Unicenter NSM policy. The policy also contains a property for the polling rate. The Xerox Agent default polling rate will be set to 10 minutes.

If the printer support traps and is registered, the status will be updated when a device sends a trap.

The color of the icon is determined by using the combination of the Xerox Agernt and Ping Agent. The color will also propagate to the top of the network.

The relation between the color-code and the printer state is presented in the following table.

Printer State	Color
Down (Ping Agent)*	Black
Low Toner	Yellow
No toner	Red
Low Paper	Yellow
No Paper	Red
Door Open	Red
Offline	Red
Service Requested	Yellow
Paper Jam	Red

*Only available printer state for DC220/230

The Xerox Agent

The Xerox Agent provides the interface between the Xerox devices on the network and Unicenter NSM. It interprets messages from the Xerox devices and forwards them to Unicenter NSM.

The following described software modules that are a part of the Xerox Agent solution.

Xbusiness.exe

This module has two basic functions:

- 1 Creates the Xerox Business Process View.
- 2 Checks the repository for all object device classes and reclassifies the Xerox devices to their specific printer class.

If you have deleted the Xerox Business Process View and wish to recreate it, run the module, xbusiness.exe. It can be found in the Xerox folder in your NSM folder.

XUpdate.exe

This module is running at all times to check for a newly discovered Xerox printers and add them to the Business Process View.

TrapRegSingle.exe / TrapUnReg Single.exe

This module will run when the **Single Printer Trap Reg** or **Single Printer Trap Unreg** right click menu selection is made when a Xerox device is selected.. One device is configured or unconfigured to send SNMP traps to the Xerox Agent.

TrapRegviaMenu.exe / TrapUnRegviaMenu.exe

This module will run when **Auto Trap Registration** or **All Printers Trap UnRegister** right click menu selection is made when a Xerox device is selected. All devices in the repository are configured or unconfigured to send SNMP traps to the Xerox Agent.

Launch of CentreWare™ Internet Services

When you right-click on the device icon or image the menu that appears will include a new menu item for launching the CentreWare™ Internet Services embedded web server.

The Xerox Agent is unable to automatically detect the presence or absence of a printer embedded web server. If this menu item is selected for a printer without an embedded web server a failed link will result. For example, if you select this item for a printer connect to the network with the Xerox CentreDirect External Print Server (External Ethernet Adapter).

Integration with Xerox CenterWare Web / Xerox Device Manager

Xerox for Unicenter also provides access to Xerox CenterWare Web when it is being used in conjunction with Unicenter to manage Xerox devices. The integration allows easy access to the CenterWare Web server home page from the Unicenter user interface.

Configuration

By selecting a Xerox device with a right click you can configure the Xerox CenterWare Web server address. Select the "Configure CWW" menu item. Configuration is only required to be completed once per Unicenter server. The complete URL to the CenterWare Web server is required.

I.e.: <http://192.168.0.1/CenterWareWeb>

Launch

Launch the Xerox CenterWare Web server by right clicking a Xerox device and selecting the "CenterWare Web" menu item.

All CenterWare Web features are then available.

Description of Xerox Agent popup menu

You can also invoke Agent View and View Node by a right mouse click on the Xerox Agent icon. The following menu options will be displayed:

Object View

This view is used to see all the mib objects. It require compile version of SNMP mibs in SNMPV1. Unicenter-NSM support SNMPV1 mibs.

View Node

This view will display the current condition of the Ping Agent and the Xerox Agent. The Node View displays the printer subsystems under the Xerox Agent and their current state in a tree format. The color-coding represents the state of that component.

By selecting either of these two nodes with the right mouse botton and selecting **Event Browser** a list of events with the current error condition is displayed. This provides an additional place to look events.

You can change the display preferences by selecting **View | Display Preferences**

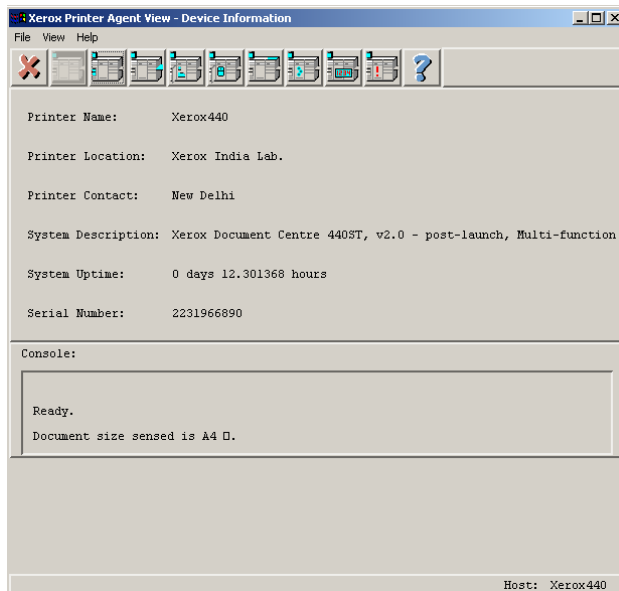
View Agent

In this view you can see all the printer details under different agent views.

The available tabs are Device Information, Input Trays, Output Trays, Consumables, Storage, Covers, Services, Counters and active Alerts.

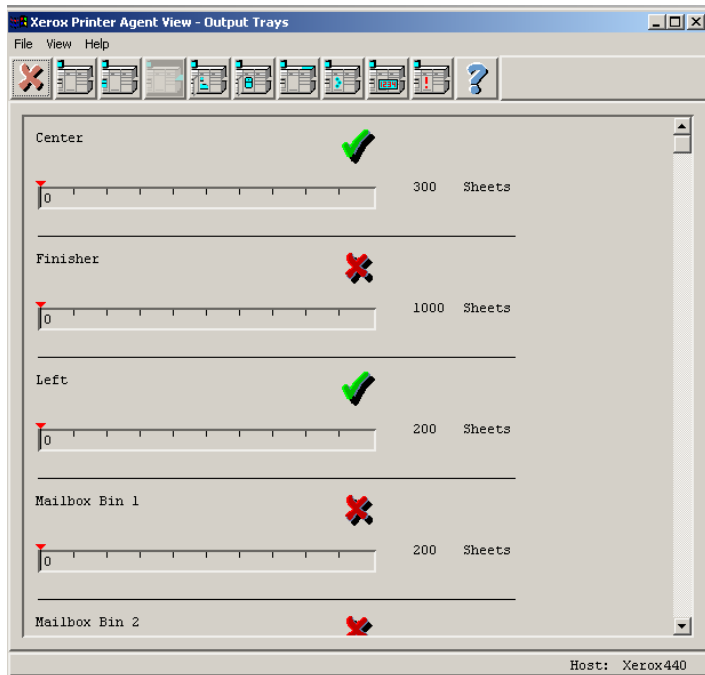
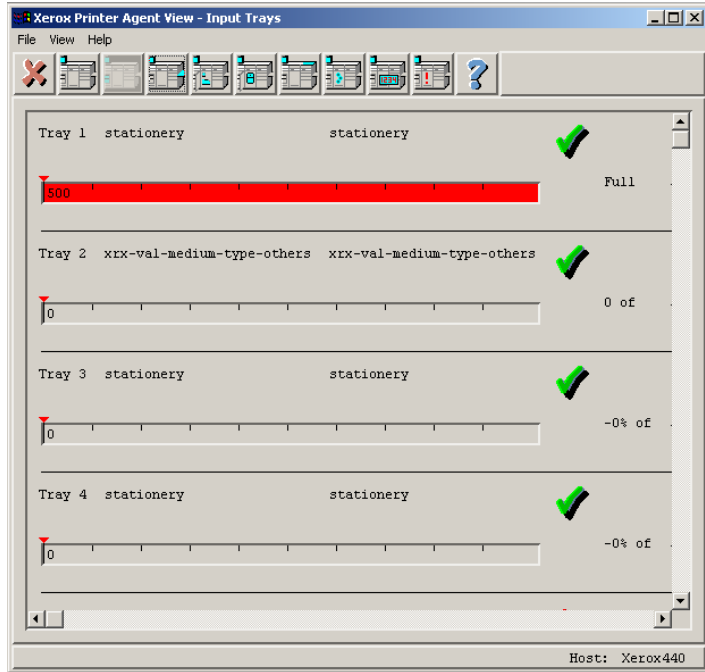
Device Information:

General device information is provided in this screen. The device's serial number and a remote view of the front console is also shown.



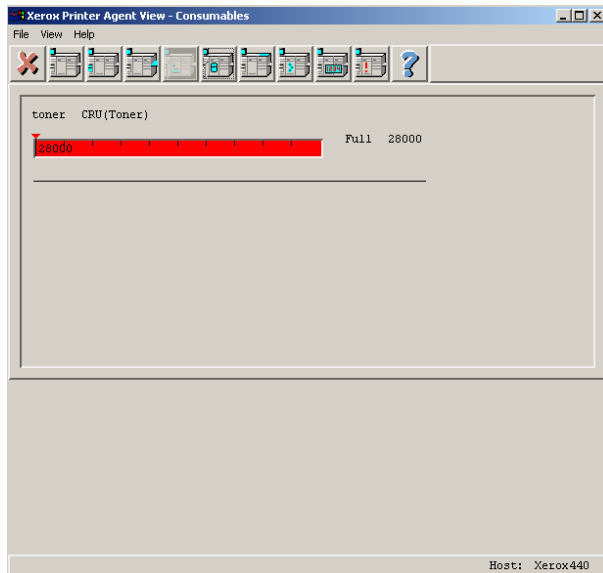
Input Trays and Output Trays:

The input and output tray screens provide tray levels. Tray status is shown using the check mark (read) or "X" (unavailable) icon. The input tray view also provides the paper type used in each tray.



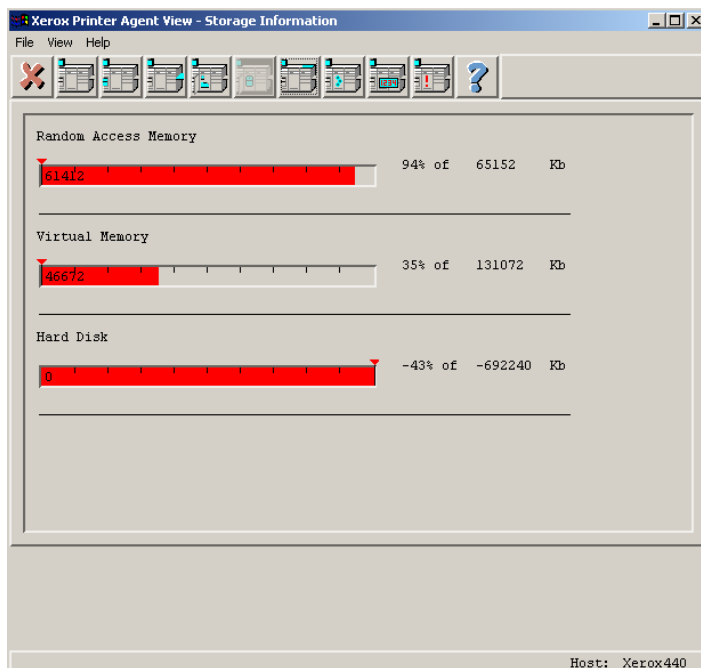
Consumables:

The consumable view provides the level of each consumable the device requires. The list will differ between devices.



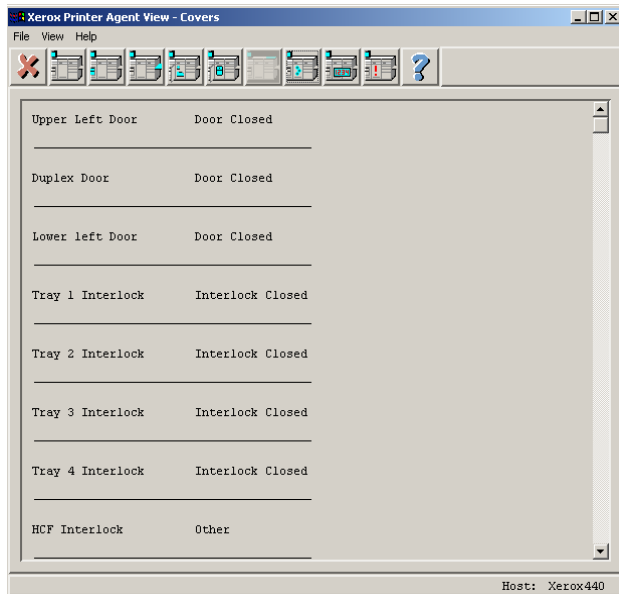
Storage Information:

Storage information view provides a list of installed memory and drive space along with the amount of memory currently being used at the device.



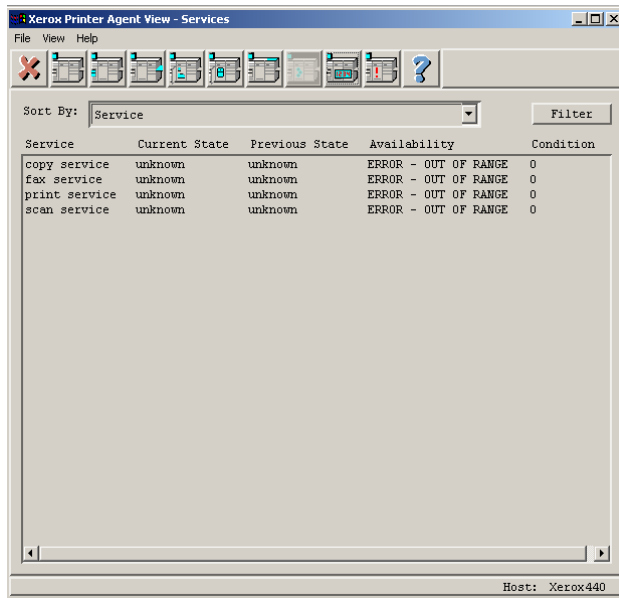
Covers:

The covers view lists all covers and the current state of the interlocks for each cover. Only covers which are interlocked will be provided.



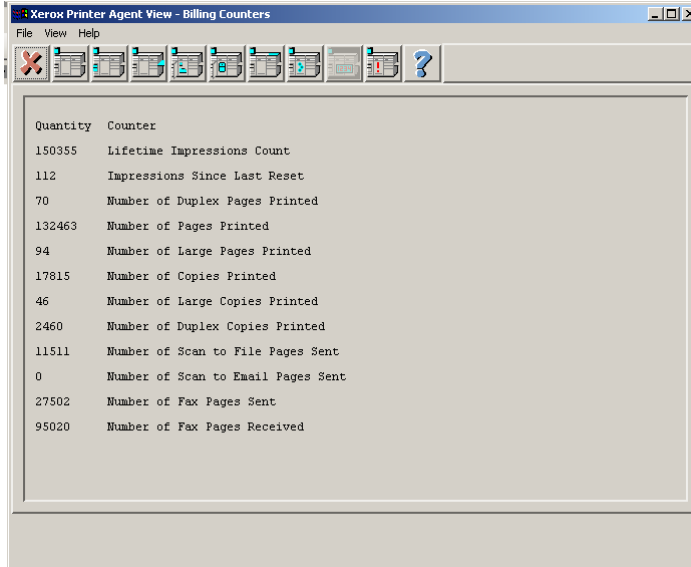
Services:

The services view will display the state of copy, fax, and scan services available for each device if known.



Usage Counters:

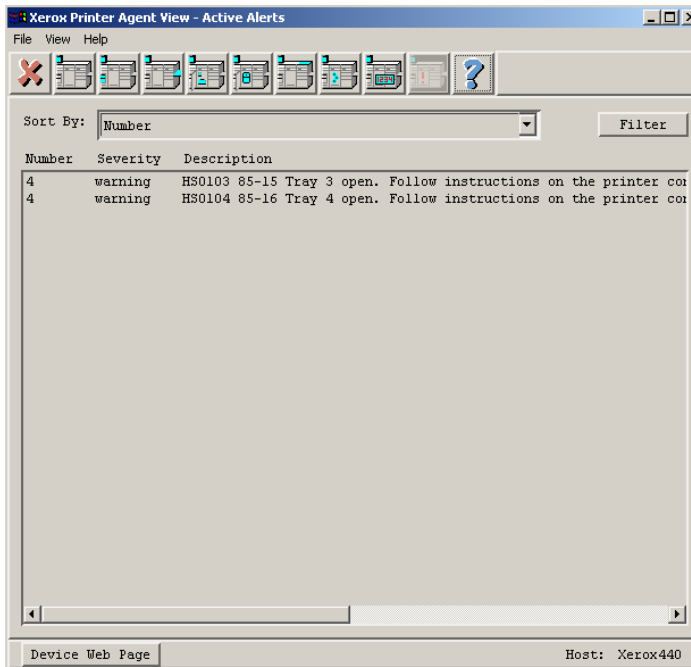
The Usage Counter view displays the current list of usage counters and the current value.



Quantity	Counter
150355	Lifetime Impressions Count
112	Impressions Since Last Reset
70	Number of Duplex Pages Printed
132463	Number of Pages Printed
94	Number of Large Pages Printed
17815	Number of Copies Printed
46	Number of Large Copies Printed
2460	Number of Duplex Copies Printed
11511	Number of Scan to File Pages Sent
0	Number of Scan to Email Pages Sent
27502	Number of Fax Pages Sent
95020	Number of Fax Pages Received

Active Alerts:

The active alerts view displays the active alert conditions in a list. The severity and description are provided.



Sort By:

Number	Severity	Description
4	warning	HS0103 85-15 Tray 3 open. Follow instructions on the printer co
4	warning	HS0104 85-16 Tray 4 open. Follow instructions on the printer co

Device Web Page Host: Xerox440

Integration with Enterprise Managers

CentreWare™ for Unicenter NSM provides integration with two enterprise managers.

- Event Management
- Problem Management

Event Management

Event enterprise is used to create a message record and message action for your events. After integration of the module, events are forwarded to the Event console. Whenever a printer has any problem, the Xerox Agent detects it using the various SNMP objects and sends the event to the Console. The CentreWare™ Unicente NSM installation utility creates message records and message actions.

You can add new message records and message actions at any time. To do this requires a proper understanding of the Xerox_10.cnf file and other Message record related files.

When a critical event is detected for a Xerox printer a red banner flying across your PC desktop is displayed. The banner contains the text of problems detected. For example, <PrinterIdentification><Time HH:MM>Agent Xerox Printer No Paper.

Problem Management

This function is closely related to Event Management. You can create a problem ticket based on the problem type reported.

CentreWare™ for Unicenter NSM uses the escalation table to escalate the priority of the problem if no action is taken within the specified time. By assigning a Priority Escalation policy, you can automate the escalation of a problem's Priority and/or Responsibility Area. The Escalation policy is defined in the Escalation Table.

As determined by the time interval specified, the priority of the problem will be escalated and the person responsible for correcting the problem will also be re-assigned.

In addition CentreWare™ for Unicenter NSM creates a new status code called PENDING. It also creates a new entry in the PGMT table with the source component (Agent) and the event (Xerox).

Integration with Advanced Help desk

When the Xerox Agent detects any problem, it checks for the installed path of the Advanced Help Desk and generates a Trouble Ticket.

Trouble Tickets are generated for four error conditions:

- Door Open
- Paper Jam
- No Toner
- No Paper

To view the requests, open the Request Bins tab on the Service Desk window.

Troubleshooting

If you have problems after you have installed CentreWare™ for Unicenter NSM, consult the table below for a possible remedy.

Symptoms	Possible causes	Solution
The icon on the 2D map is not the proper icon for the Xerox Printer	<ul style="list-style-type: none"> Classes are not imported correctly in the repository 	<ul style="list-style-type: none"> Check the icon and the printer class name using the class wizard utility
There is no Xerox Agent icon under the Xerox Printer icon either in 2D or 3D.	<ul style="list-style-type: none"> Awservices are not running SNMP agent on the printer is not working correctly. 	<ul style="list-style-type: none"> Check the printer class name in the DSM Wizard under the Xerox Agent name "XeroxAgt". Run the command <code>resetdsm</code> Run the command <code>awservices start</code>.
A Xerox Printer is not discovered.	<ul style="list-style-type: none"> The SNMP agent is not working properly on the printer. There is a problem with the network connectivity. The printer's class is not defined in the repository. 	<ul style="list-style-type: none"> Check the worldview agent service in the control panel. Check the class in the class wizard. Ping to that IP address. Run the manual discovery command <code>dscvrone i ip address u sa</code>
Node view is not showing the proper color.	<ul style="list-style-type: none"> The SNMP objects that decode the color may have an incorrect value. 	<ul style="list-style-type: none"> Use <code>awget</code> command to check the value of <code>hrError detectedState</code>. Run the command <code>awm_catch</code> to check value coming from the printers.
No banner displays in the window when a fault is received.	<ul style="list-style-type: none"> Event services are not running 	<ul style="list-style-type: none"> Check the services using command <code>unifstat</code> Or run the command <code>unicntrl start uni</code>
No event displays in the event console window	<ul style="list-style-type: none"> Event services are not running. Message records are not added properly. 	<p>At the command prompt:</p> <ul style="list-style-type: none"> Run command <code>unifstat</code>. Run <code>unicntrl start uni</code>. Run <code>Oprcmd opreload</code>.
No problem ticket created in the problem management.	<ul style="list-style-type: none"> Incorrect message records. 	<ul style="list-style-type: none"> Check the message records and message actions.
A Trouble Ticket is not generated in the Advanced Help Desk	<ul style="list-style-type: none"> AHD services are not running. 	<ul style="list-style-type: none"> Check all AHD services in the control panel and start it. Check the path of the <code>ahd.dll</code> in the message records.
The Xerox Printers Business Process View (BPV) is not present	<ul style="list-style-type: none"> A problem exists in the repository. 	<ul style="list-style-type: none"> First end process for <code>XUpdate.exe</code>. Find <code>Xbusiness.exe</code> application in the Xerox folder in

present		<p>the NSM installation folder.</p> <ul style="list-style-type: none"> • Run the XBusiness.exe application with the current name of the repository.
No problem ticket created in the problem management.	<ul style="list-style-type: none"> • Incorrect message records. 	<ul style="list-style-type: none"> • Check the message records and message actions.
A Trouble Ticket is not generated in the Advanced Help Desk	<ul style="list-style-type: none"> • AHD services are not running. 	<ul style="list-style-type: none"> • Check all AHD services in the control panel and start it. • Check the path of the ahd.dll in the message records.
The Xerox Printers Business Process View (BPV) is not present	<ul style="list-style-type: none"> • A problem exists in the repository. 	<ul style="list-style-type: none"> • First end process for XUpdate.exe. • Find Xbusiness.exe application in the Xerox folder in the NSM installation folder. • Run the XBusiness.exe application with the current name of the repository.
New printers are not discovered under the Xerox Printer BPV	<ul style="list-style-type: none"> • Xupdate.exe is not running. 	<ul style="list-style-type: none"> • Check for Xupdate.exe application.
Xerox device traps do not appear in the console	<ul style="list-style-type: none"> • SNMP Trap server is not activated 	<ul style="list-style-type: none"> • Start->Programs->EnterpriseManagers- Double-click"Machine Name": • Double click configuration icon: • Double click Settings Icon. • Double click SNMP Trap Server Activated • Set to Yes -> OK out. • From Command prompt run • Unicntrl stop opr • Unicntrl start opr

Appendix – Xerox Agent Installer / Un-Installer

Installer

The installer is a simple Install-Shield utility that will automate the addition of the files used for the agent and the inclusion of the agent technology in the Unicenter NSM functionality.

The installer will copy the models, icons, script files and policy files to the NSM installation directory. It will also edit several files to enable the agent to work with Unicenter NSM.

The modifications performed by the installer are as follows:

Substitute the path to your NSM folder for c:\NSM\.

- Copy all the icons to c:\NSM\icons
- Copy all the images to c:\NSM\images
- Copy all the mib files to c:\NSM\Schema\included
- Copy all the models to c:\NSM\models
- Copy new policy related files (Xeroxagt.atp, NodesXrx.dat) to c:\NSM\services\config\aws_nsm\dm
- Copy agent world view file (xerox.wvc) to c:\NSM\services\config\aws_wvgate
- Copy Xerox repository related files(xeroxPrn.tng, xeroxRmv.tng) to c:\NSM\sqlCopy mibs with the extension .txt (e.g RFC1514.txt) to c:\NSM\services\config\mibs\ for Mib browser.
- Create a folder named Xerox in the C:\Program Files folder and a folder named CentreWare4TNG in the Xerox folder.
- Copy to this folder all the message records files for Event management (MsgRecDef.txt, MsgRecRemove.txt) and Problem management (XeroxMgpt.bat, XeroxMgptRemove.bat).
- Copy the executables files (Xupdate.exe, XBusiness.exe) to the c:\Program Files\Xerox\Centroware4TNG folder.
- Copy the four files:
 - NoPaperAHD.txt
 - NoTonerAHD.txt
 - OpenDoorAHD.txt
 - PaperJamAHD.txt
- to the C:\Program Files\Xerox\CentreWare4TNG folder used for the creation of trouble ticket in the Advanced Help Desk module.
- Copy the readme.txt file that contains suggested changes to some settings before running the PM, AHD on your PC.
- Request a resetdsm.
- Start services by executing awsservices start.

Uninstaller

The un-installer will remove all files copied to your system by the Installer, undo any file changes done and remove the classes corresponding to the Xerox Agent. To run the un-installer, use the "Add/Remove Programs" in the "Control Panel" and select **Xerox CentreWare™ for Unicenter NSM**.

- Remove the lines added to the files in the install portion.
- Delete all files copied.
- The un-installer will then call TRIX to remove the classes from the repository, by executing from command: trix
- Import the file Xeroxrmv from the c:\NSM\sql directory.
- Request a resetdsm.
- Start services by executing awservices start.
- There may be some files remaining on your system that are no longer required. To complete the process of removing these files, you should restart your PC.

CA UNICENTER NSM R11

Introduction

Xerox CentreWare™ for Unicenter NSM* provides the added identification of several different types of Xerox printers in the general discovery performed by Unicenter NSM.

Once successfully installed, you will be able to see all the discovered Xerox printers under one Unicenter NSM Business Process View. In addition, CentreWare™ for Unicenter NSM provides full integration with Alert Management, and the choice to integrate with Advanced Help Desk.

Key Benefits and Features

Feature	Benefits
Printer Discovery	Provides the automatic identification of Xerox printers on your network and presents them with recognizable icons.
Color-Coded Device Status	Automatically changes the color in the printer icon to reflect the printer status.
Access to the printer embedded web server, Internet Services	If your printer contains an embedded web server, you can easily access it through the icon displayed in the Xerox Agent.
Custom Business View	Managing the Xerox printers on your network will be made easier by displaying all the discovered Xerox printers in a single business view.
Dynamic Business View	Dynamically managing all the discovered Xerox printers on your network in a single business process view.
Full integration with the features of Unicenter	Provides full use of Node View, Agent View, Management Command Center, Event management, Alert management and Advanced Help Desk.
Automatic trap registration for all supported Xerox printers	CentreWare™ for Unicenter NSM will determine if the Xerox device supports SNMP traps and will register/deregister devices automatically.

* Unicenter NSM and its options are proprietary software programs belonging to Computer Associates, Inc. (CA) and / or its licensors.

System Requirements

Hardware Requirements

1GB of RAM

50MB of hard disk space

Software Requirements

Following software must be installed on your PC before installing CentreWare™ for Unicenter NSM.

- Microsoft Windows 2000 Server, with any later maintenance.
- Microsoft Windows 2000 Advanced Server, with any later maintenance.
- Microsoft Windows 2003 Server (32-bit version).
- Microsoft SQL server 6.5 or Ingres 3.0 or equivalent.
- Microsoft SNMP Services
- TCP/IP Protocol
- CA Unicenter NSM R11 and NSM R11.1 with agent services unicenter manager and Alert Management.
- Advanced Help Desk (AHD) server if you intend to use this feature.
- Microsoft Internet Explorer® or Netscape Navigator® versions 4.0 or later, if you wish to access a printer embedded web page.

Using CenterWare™ for Unicenter NSM

Unicenter NSM provides the discovery of Xerox devices. CentreWare™ for Unicenter NSM has added the identification of different type of Xerox printers to a general discovery performed by Unicenter NSM.

Printer Discovery

The primary discovery identifies the Xerox devices on the network and presents them with general Xerox icons for 2-D.

Creation of Xerox Dynamic BusinessView

Afer successful installation of CenterWare for Unicenter NSM, the user will see all the discovered Xerox printers under one Dynamic Business Process View. It will also display the current status of all the discovered Xerox printers. The name of this dynamic business process view is "Xerox_ Printers".

The printers will now be present in the Dynamic Business Process View as well as the IP Map.

CentreWare™ for Unicenter NSM will automatically add Xerox printers to this view as they are attached to the network and discovered by Unicenter NSM.



Color-Coded Device Status

Each printer will be denoted by an icon. Each icon will be color-coded to represent the current status of the printer. The color-coded status is provided via the Unicenter NSM policy. The policy also contains a property for the polling rate. The Xerox Agent default polling rate will be set to 10 minutes.

If the printer support traps and is registered, the status will be updated when a device sends a trap.

The color of the icon is determined by using the combination of the Xerox Agent and Ping Agent. The color will also propagate to the top of the network.

The relation between the color-code and the printer state is presented in the following table.

Printer State	Message	Color
Offline	Xerox Down	Red
Paper Jam	Xerox Paper Jam	Red
Door Open	Xerox Door Open	Red
NoPaper	Xerox Paper	Red
Low Paper	Xerox Paper	Yellow
NoToner	Xerox Toner	Red
Low Toner	Xerox Toner	Yellow
Service Requested	Xerox SerReq	Red
Input Tray Missing	Xerox noInput	Red
Output Tray Missing	Xerox noOutput	Red
Maker Supply Missing	Xerox noMarker	Red
Input Tray Empty	Xerox InEmpty	Red
Output Tray Fullout	Xerox fullOutput	Red
Overdue Preventative Maint	Xerox OverMaint	Red

The Xerox Agent

The Xerox Agent provides the interface between the Xerox devices on the network and Unicenter NSM. It interprets messages from the Xerox devices and forwards them to Unicenter NSM.

The following described software modules that are a part of the Xerox Agent solution.

Dynamic Business Process View

This module has three basic functions:

- 1** Creates the Xerox Dynamic Business Process View.
- 2** Checks the repository for all object device classes and reclassifies the Xerox devices to their specific printer class.
- 3** Check for a newly discovered Xerox printers and add them to the Business Process View.

If you have deleted the Xerox Dynamic Business Process View and wish to recreate it, import the module, DynamicBPV Install.tng. It can be found in the Xerox folder in your CCS/WVEM folder.

TrapRegSingle.exe / TrapUnReg Single.exe

This module will run when the **Single Printer Trap Reg** or **Single Printer Trap Unreg** right click menu selection is made when a Xerox device is selected. One device is configured or unconfigured to send SNMP traps to the Xerox Agent.

TrapRegviaMenu.exe / TrapUnRegviaMenu.exe

This module will run when **Auto Trap Registration** or **All Printers Trap UnRegister** right click menu selection is made when a Xerox device is selected. All devices in the repository are configured or unconfigured to send SNMP traps to the Xerox Agent.

Integration with Enterprise Managers

CentreWare™ for Unicenter NSM provides integration with an enterprise manager.

- Alert Management

Alert Management

Name	Description	Created	Created By	Modified	Modified By
Default	Default Queue		Install		
Xerox		12/28/2006 19:22:39	rsmadmin		

Alert enterprise is used to create a message record and message action for your Alerts. After integration of the module, Alerts are forwarded to the Event console. All the alerts are processed using a Alert Queue and Alert classes. Whenever a printer has any problem, the Xerox Agent detects it using the various SNMP objects and sends the Alert to the Xerox Alert Queue which is associated with Xerox Alert class and then to the Console. The CentreWare™ Unicente NSM installation utility creates message records and message actions.

You can add new message records and message actions at any time. To do this requires a proper understanding of the Message record related files.

ID	Name	Initial Queue	Description	Created
DEFAULT	Default	Default	Default Class	
XeroxPrinter	XeroxPrinters	Xerox		01/16/2007 16:

When a critical Alert is detected for a Xerox Printer a red banner flying across your PC desktop is displayed. The banner contains the text of problems detected. For example, <PrinterIdentification><Time HH:MM>Agent Xerox Printer No Paper.

Integration with Advanced Help desk

When the Xerox Agent detects any Alert, it checks for the installed path of the Advanced Help Desk and generates a Trouble Ticket.

Trouble Tickets are generated for eight error conditions:

- Xerox Door Open
- Xerox Jammed
- Xerox Toner
- Xerox Paper
- Xerox NoMarker
- Xerox InEmpty
- Xerox Out
- Xerox OverMaint

To view the requests, open the Request Bins tab on the Service Desk window.

Configuration for Trouble Ticket Generation:

You can create a ticket based on the Alert type reported. The Alert Management server has to be configured with Xerox in Alert Queues, Alert Classes, Escalation Policy and Alert Global Definition as shown in the screen shots.

CentreWare™ for Unicenter NSM uses the Alert Queues, Alert Z, escalation policy and Alert Global Definitions.

Step 1: Alert Queues

Name	Description	Created	Created By	Modified
Default	Default Queue		Install	
Xerox		12/28/2006 19:22:39	nsmadmin	

2 record(s); 1 selected

Step 3: Escalation Policy

Escalation name	Created	Created By	Modified
Default		Install	
XeroxPrinter	05/28/2007 14:42:23	teshydisuser	05/30/2007 15:19:33

2 record(s); 1 selected

4:10:12 PM

Step 2: Alert Classes

ID	Name	Initial Queue	Description
DEFAULT	Default	Default	Default Class
XeroxPrinter	XeroxPrinters	Xerox	

2 record(s); 1 selected

Step 4: Edit Escalation Policy

Criteria for escalation policy:

- Match all of the following conditions:
 - Age of alert (hr:min): 0 : 5
 - Age in queue (hr:min): 0 : 0
 - Age since acknowledgement (hr:min): 0 : 0
 - Urgency reaches: 1
 - Duplicate count reaches: 2
 - Alert not acknowledged
- Alert alarmed: No test

Upon criteria match initiate the following:

- User action: <None>
- Display attribute: <None>
- Transfer to queue: Xerox
- Set/increment urgency: No change
- Recipient:
- Set alarm:
- Create Service Desk request:

OK Cancel

Step 5: Alert Global Definitions

Escalation policy: XeroxPrinter

Calcut DLL:PROC: : Active

Menu: <None>

Low impact limit: 5 High impact limit: 1

Low urgency limit: 5 High urgency limit: 1

Available nodes: Selected nodes: j49vk1s

Service Desk:

- URI: http://j49vk1s:8080/axis/services/USD_WebServiceSoap?WSDL
- User ID: ServiceDesk
- Password: ***** Confirm password:

User data table:

ID	Name	Description

Worldview Repositories table:

Node	User ID

OK Cancel

The following steps are to be performed manually,

- Go to Start Menu->Programs->Computer Associates->Unicenter->NSM->Enterprise Management->EM Classic->AMS->Alert Global definitions and double click it.
- Ensure that the Escalation policy is "**Xerox Printer**".
- Select the Available nodes and add to Selected nodes.
- Enter the Uniform Resource Identifier, which is the address of the web service on your primary Service Desk server into the Service Desk section of this GUI along with a username and password with administrator privileges on the service desk server.
- The default for Service Desk 6.0 is http://server:port/usd_ws/usd_ws.asmx.
- The default for Service Desk r11.x is http://servername:port/axis/services/USD_WebServiceSoap.

Troubleshooting

If you have problems after you have installed CentreWare™ for Unicenter NSM, consult the table below for a possible remedy.

Symptoms	Possible causes	Solution
The icon on the 2D map is not the proper icon for the Xerox Printer	<ul style="list-style-type: none"> Classes are not imported correctly in the repository 	<ul style="list-style-type: none"> Check the icon and the printer class name using the class wizard utility
There is no Xerox Agent icon under the Xerox Printer icon either in 2D.	<ul style="list-style-type: none"> Awservices are not running SNMP agent on the printer is not working correctly. 	<ul style="list-style-type: none"> Check the printer class name in the DSM Wizard under the Xerox Agent name "XeroxAgt". Run the command <code>resetsdm init</code> Run the command <code>awservices start</code>.
A Xerox Printer is not discovered.	<ul style="list-style-type: none"> The SNMP agent is not working properly on the printer. There is a problem with the network connectivity. The printer's class is not defined in the repository. 	<ul style="list-style-type: none"> Check the worldview agent service in the control panel. Check the class in the class wizard. Ping to that IP address. Run the manual discovery command <code>dscvrone i ip address u sa</code>
Node view is not showing the proper color.	<ul style="list-style-type: none"> The SNMP objects that decode the color may have an incorrect value. 	<ul style="list-style-type: none"> Use <code>awget</code> command to check the value of <code>hrError detectedState</code>. Run the command <code>awm_catch</code> to check value coming from the printers.
No banner displays in the window when a fault is received.	<ul style="list-style-type: none"> Event services are not running 	<ul style="list-style-type: none"> Check the services using command <code>unifstat</code> Or run the command <code>unicntrl start uni</code>
No event displays in the event console window	<ul style="list-style-type: none"> Event services are not running. Message records are not added properly. 	<p>At the command prompt:</p> <ul style="list-style-type: none"> Run command <code>unifstat</code>. Run <code>unicntrl start uni</code>. Run <code>Oprcmd opreload</code>.
No banner displays in the window when a fault is received.	Alert Management Services are not running.	<ul style="list-style-type: none"> Check the services using command <code>unifstat</code> or run the command <code>unicntrl start uni</code>. Go to Control Panel -> Administrative tools -> services -> CA-Unicenter Alert- Management services, Restart the service. Go to Start Menu->Programs->Computer Associates->Unicenter->NSM->Enterprise Management->EM classic->AMS->Alert Queues &

		<p>Alert Classes, check whether Xerox Queues and Classes are created or not.</p> <p>If not created, at command prompt run the command caampolicy -I xerox.</p>
No banner displays in the window when a fault is received.		<p>Control Panel -> Administrative tools -> services -> CA-Unicenter services, right click on it, and choose properties. Select the "Log On" tab and change the log on options from "this account" to "Local System Account." Also place a check mark in "Allow service to interact with desktop." Click "Apply" next, and close all windows. Reboot the machine or restart the Service.</p>
No Alerts are generated	<ul style="list-style-type: none"> • Incorrect message records. 	<ul style="list-style-type: none"> • Check the message records and message actions.
A Trouble Ticket is not generated in the Advanced Help Desk	<ul style="list-style-type: none"> • AHD services are not running. ▪ Alert Management Service is not running 	<ul style="list-style-type: none"> • Check all AHD services in the control panel and start it. ▪ Check Alert Management service in the control panel and start it. • After installing plugin: <ol style="list-style-type: none"> 1. Go to Start Menu->Programs->Computer Associates->Unicenter->NSM->Enterprise Management->EM classic->AMS-> Alert Global Definition and Double click on it. <p>(i) Check whether the Escalation policy is "Xerox Printer".</p> <p>(ii) Check whether the Available nodes are added to Selected nodes.</p> <p>(iii) Enter the Uniform Resource Identifier, which is the address of the web service on your primary Service Desk server into the Service Desk section of this GUI along with a username and password with administrator privileges on the service desk server. The default for Service Desk 6.0 is http://server:port/usd_ws/usd_ws.asmx.</p> <p>The default for Service Desk r11.x is http://servername:port/axis/services/USD_WebServices.oap.</p> <p>Restart Alert Management service in the control panel .</p> <ul style="list-style-type: none"> • Go to Start Menu->Programs->Computer Associates->Unicenter->NSM->Enterprise Management->EM classic->AMS->Alert Classes,

		<p>Double click on the Xerox Printers Class. Go to Actions tab and under Service Desk, check whether the create request when alert is opened & Synchronize closure of requests and alerts options are clicked.</p> <ul style="list-style-type: none"> • Go to Start Menu ->Programs -> Computer Associates->Unicenter->NSM->Enterprise Management->EM classic->AMS->Alert Queues & Alert Classes, check whether Xerox Queues and Classes are created or not. If not create them using the command caampolicy -i xerox at command prompt.
The Xerox Printers Dynamic Business Process View (DBPV) is not present	<ul style="list-style-type: none"> • A problem exists in the repository. 	<ul style="list-style-type: none"> • Find DynamicBPVInstall.tng file in the Ca install path under CCS/WVEM folder. • Import the file with the current name of the repository though GUI.
Xerox device traps do not appear in the console	<ul style="list-style-type: none"> • SNMP Trap server is not activated 	<ul style="list-style-type: none"> • Start->Programs->EnterpriseManagers- Double-click"Machine Name": • Double click configuration icon: • Double click Settings Icon. • Double click SNMP Trap Server Activated • Set to Yes -> OK out. • From Command prompt run • Unicntrl stop opr • Unicntrl start opr
Management Command Center (MCC) is not opening	<p>CA Worldview Severity Propagation Service is not running</p>	<ul style="list-style-type: none"> • Control Panel -> Administrative tools -> Services -> CA Worldview Severity Propagation Service, right Click on it, and Restart the service.

Appendix – Xerox Agent Installer / Un-Installer

Installer

The installer is a simple Install-Shield utility that will automate the addition of the files used for the agent and the inclusion of the agent technology in the Unicenter NSM functionality.

The installer will copy the models, icons, script files and policy files to the NSM installation directory. It will also edit several files to enable the agent to work with Unicenter NSM.

The modifications performed by the installer are as follows:

Substitute the path to your NSM folder for C:\Program Files\CA\SharedComponents\CCS

- Copy all the icons to C:\Program Files\ CA \ SharedComponents\CCS\WVEM\ icons
- Copy all the images to C:\Program Files\CA\SharedComponents\CCS\WVEM\ images
- Copy all the mib files to C:\Program Files \ CA \ SharedComponents \CCS \AT\ SERVICES\CONFIG\MIBS.
- Copy new policy related files (Xeroxagt.atp, NodesXrx.dat) to C:\Program Files \ CA \ SharedComponents \ CCS\ AT\ SERVICES \ CONFIG \ aws_nsm\dm
- Copy new policy related files (Xeroxagt.atph) to C:\Program Files \ CA \ SharedComponents \ CCS\ AT\ SERVICES \ CONFIG \ aws_nsm\sys
- Copy agent world view file (xerox.wvc) to C:\Program Files \ CA \ SharedComponents \ CCS\ AT\ \ services \ config \ aws_wvgate
- Copy new policy related files (browser.xeroxagt) to C:\Program Files \ CA \ SharedComponents \CCS \AT \SERVICES \CONFIG\abrowser
- Copy Xerox repository related files(xeroxPrn.tng, xeroxRmv.tng) to C:\Program Files\ CA \ SharedComponents \ CCS \WVEM \sq\Imports

- Create a folder named Xerox in the C:\Program Files folder and a folder named CentreWare4TNG in the Xerox folder.
- Copy to this folder all the message records files for Event management (MsgRecDef.txt, MsgRecRemove.txt) .
- Copy the executables files to the c:\Program Files\Xerox\Centroware4TNG folder.
- Create Xerox related Alert Queues, Alert Classes, Escalation policy and Alert Global Definitions to integrate Alert management with Unicenter Agent and manager. Also used for the creation of trouble ticket in the Advanced Help Desk module.
- Copy the readme.txt file that contains suggested changes to some settings before running the AHD on your PC.
- Request a resetdsm init.
- Start services by executing awservices start.

Uninstaller

The un-installer will remove all files copied to your system by the Installer, undo any file changes done and remove the classes corresponding to the Xerox Agent. To run the un-installer, use the "Add/Remove Programs" in the "Control Panel" and select **Xerox CentreWare™ for Unicenter NSM**.

- Remove the lines added to the files in the install portion.
- Delete all files copied.
- The un-installer will then call TRIX to remove the classes from the repository, by executing from command: `trix`
- Import the file `Xeroxrmv` from the `C:\Program Files\CA\SharedComponents\CCS\WVEM\sql\Imports` directory.
- The un-installer will then call TRIX to remove the Xerox DBPV from the repository, by executing from command: `trix`
- Import the file `DynamicBPV Delete` from the `C:\Program Files\CA\SharedComponents\CCS\WVEM\sql\Imports` directory.
- Delete Xerox related Alert Queues and Alert classes manually or Run `caamsurge` command at command Prompt (eg: "`caamsurge -d 0`" – deletes all the alerts)
- Request a `resetdsm` init.
- Start services by executing `awservices start`.
- There may be some files remaining on your system that are no longer required. To complete the process of removing these files, you should restart your PC.