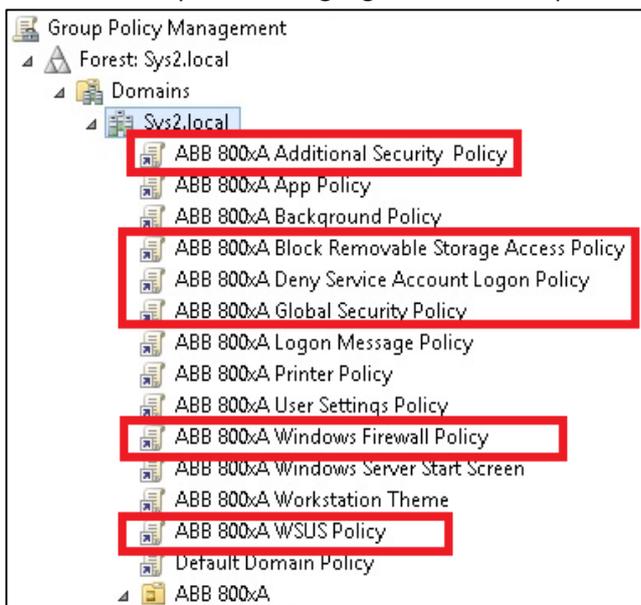


System 800xA v6.0.3 Update Procedure

Prepare System for Update

1. Identify your **Update Node** in the system, keeping in mind Aspect Servers are not allowed to be used as update nodes. Preferably, choose one connectivity server (combined with DCN, if available) to be your Update Node.
2. Copy 800xA 6.0.3 Full Media to [D:] partition of Primary Domain Controller and share Media folder with "Everyone. Right click on Media folder, select "Share with" -> "Specific people...", type "Everyone" then click "Add" button.
3. Verify that all system nodes are connected and online via RNRP tool or System Configuration Console.
4. Following backups have to be taken:
 - Acronis image backups as needed
 - Tag Database in MDB format (using Uploader aspect in each Harmony OPC Server Network)
 - 800xA System Maintenance Backup
 - 800xA System Structure Backup as needed (using 'Import Export' tool)
5. Virus scanning must be disabled during installation of System 800xA software and updates. Disable McAfee Antivirus for all nodes planned for the update from ePO server.
6. Check if there are any reserved entities, use Find Tool to identify the reserved entities and release them.
7. Stop all third party and other non-800xA clients connected to the 800xA system (such as third party OPC DA, HDA, and AE clients that are accessing the 800xA System) as these will disturb the update.
8. Close the Plant Explorer and other 800xA application windows.
9. Disable all Group Policies highlighted in the snapshot below from the Primary Domain Controller.



- Right click on each GPO and **clear** the check on "Link Enabled"
- Run "gpupdate /force" command from command prompt with Administrative privileges on all system nodes

10. From "User Structure", go to the following 800xA user groups and add "800xAInstall" & "800xA Service" users manually by clicking on "Add..." button from "Members" tab:
 - a. Application Managers
 - b. Application Engineers
 - c. System Engineers
11. Ensure that Microsoft hotfix (**KB2919355**) is installed on all Server nodes (including DCs) with Windows 2012 R2 Operating System. If this hotfix is not installed yet, a prerequisite hotfix (**KB2919442**) shall be installed before installing (**KB2919355**).
12. Check at each node of the system, if "NPTState.nps" file exists in the following path:
[C:\ProgramData\ABB\800xA\SystemInstaller]
If not, get the NPTState template file which is prepared based on node types in the system, and copy it to this folder then rename it to "NPTState.nps".

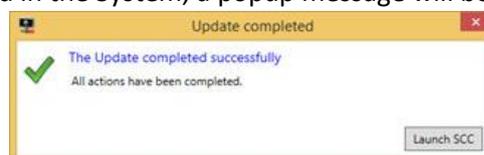
System 800xA v6.0.3 Update Procedure

Perform System Update

1. Stop all configuration and engineering activities being performed in the System while running the update.
2. Log in to the **Update Node** using **800xAInstall** user account.
3. Start **Node Preparation Tool (NPT)** from Full Media shared path by double clicking on **Setup.exe** application.
4. Fill in all the required information in the empty fields, and select checkbox "**Launch System Configuration Console**" then click on "**Start node preparation**" button.
5. Once the progress banner disappears, the **Configure System** task will be started automatically.
6. Open the "Update System – Preparation" wizard using the **Updates** icon.
7. Select **Centralized Media Distribution** and browse the shared path of the Full Media.
8. Proceed to next page of the wizard to analyze the Update Package, once completed, proceed to next page.
9. Select **Limit bandwidth usage** to avoid overloading the network while copying the update package to other nodes. Proceed to the next step and start media distribution.
10. Initiate the software update process in the wizard by using the **Initiate Update** command from the last page of the wizard.
11. Look for and resolve any invalid properties. Such properties are highlighted in the task, and it will not be possible to proceed until they are valid.
12. Use the **Update System** command to proceed.
13. Select **Online Update** and create update groups in **Configure Node Groups** dialog, considering the following: (*Refer to Nodes Grouping Template on next sheet*)
 - Create node groups in a way that update process should not disturb system functionality. In other words, redundant pairs (i.e., connectivity servers) shall be in different groups.
 - Assign the three Aspect Servers to three different groups.
 - It is recommended to place the Update Node in the last group separately.
14. Open the **User Notification** dialog to configure a message displayed to logged in users. This will display a countdown timer on a node before the update starts on it.
15. Proceed by using the **Next** command to close the SCC and open an Update dialog.
16. Begin the update procedure by using the **Run System Ready Check** command to verify that all nodes are ready to install the update.
17. Select the group that is intended to start the update with, and proceed with the '**Run Software Update**' command, keeping in mind the following considerations:
 - Application engineering and changes in system configuration must **not** be performed during online update.
 - All ABB services must be in **running** state on all nodes in the selected group before starting the online update. In case not all ABB services are up and running on certain nodes in the group, a yellow circle will be shown next to the group. Accordingly, verify this with the System Status Viewer, and correct any problems before proceeding with the group.
18. Repeat the above step for all remaining groups as soon as another group has finished.

Note: after updating the **Update Node** and once the node is restarted, the update wizard shall automatically popup to be able to proceed to the next step (**Finalization**). If not, go to the path: "**C:\Program Files\ABB 800xA\System Installer\bin**" then right click on the file "**ABB.xA.SystemInstaller.Update.exe**" and select **Run as administrator**.
19. Once all groups have run the Software Update phase, use the '**Run Finalization**' command to finish the update of System Extensions in the Aspect Directory.

Note: Updating the System Extensions may take a long time depending on how many System Functions that were updated.
20. Once an update has been installed in the System, a popup message will be displayed as shown below:



System 800xA v6.0.3 Update Procedure

Nodes Grouping Template

Group-1 Redundant History Server	
Group-2 Primary History Server	
Group-3 Archive Server	
Group-4 One Redundant Connectivity Server	
Group-5 One Primary Connectivity Server	
Group-6 Other Redundant Connectivity Servers (Except Update Node)	
Group-7 Other Primary Connectivity Servers (Except Update Node)	
Group-8 One Client	
Group-9 Other Clients	
Group-10 Tertiary Aspect Server (ASR2)	
Group-11 Secondary Aspect Server (ASR1)	
Group-12 Primary Aspect Server (ASP)	
Group-13 Update Node (Recommended CS+DCN)	
Group-14 Redundant Domain Controller (if applicable)	
Group-15 Primary Domain Controller (if applicable)	

System 800xA v6.0.3 Update Procedure

Expected Issue

An expected error may appear during the update of nodes which have Harmony Connect and History DCN combined at the same node.

Resolution:

Provide the new port number using the "**800xA History Port Configuration Utility.exe**" tool. Follow the steps as below:

1. Copy the tool from the media location "**\Applications\History**" to a temporary location on the **800xA History Data Collector** node.
2. Right click on the **800xA History Port Configuration Utility.exe** and **Run as Administrator** to launch the tool.
3. Enter the port no **7685** when prompted.
4. Close the tool after success message is displayed.
5. Restart **IIS** from **Command Prompt with Admin** privileges using these commands:
 - IISRESET /STOP
 - IISRESET /START
7. Click the "**Retry**" Button in the **Deploy Window**.
8. Harmony package should be updated successfully.

System 800xA v6.0.3 Update Procedure

Update of Domain Controllers

1. Uninstall the four ABB software packages in the following order:
 - Diagnostics Collection Tool Plugins
 - Diagnostics Collection Tool
 - ABB 800xA RNRP
 - ABB 800xA Common Install
2. Delete the folder [C:\ProgramData\ABB]
3. Before proceeding to the next step, ensure that the status of “WMI Performance Adapter” service (wmiApSrv) is **stopped**. If not, wait till its status changes from running to stopped.
4. Run NPT from 6.0.3 Full Media and select “**Generic Node**” in “Node Options”. This has to be done for both Domain Controllers, one at a time. Restart of Domain Controller is recommended after NPT completion.
5. Once the NPT is completed for both Domain Controllers, open “System Configuration Console” from Primary Aspect Server, go to *System Setup > Configure System > System Nodes > Add node...*, then add both domain controllers as “Generic” node type.
6. Before clicking “Deploy system” button, ensure that “**PC, Network Software Monitoring Services for Harmony and Melody**” function is added and deployed to all Harmony Connectivity server nodes. If not, add this function to all Harmony Connectivity servers then click on “Deploy system” button.

System 800xA v6.0.3 Update Procedure

Post Update Procedure

1. Install **800xA Base 6.0.3 RU1** and **History RU1** following the same update procedure explained earlier.
2. Enable all Group Policies, which have been disabled during preparation step, from the Primary Domain Controller. Right click on the disabled GPO and select "Link Enabled".
3. Enable McAfee Antivirus for all nodes from ePO server.
4. From "User Structure", go to the following 800xA user groups and remove "800xAInstall" & "800xA Service" users manually by clicking on "**Synchronize with windows group**" button from "**Members**" tab:
 - a. Application Managers
 - b. Application Engineers
 - c. System Engineers
5. Load 800xA 6.0.3 License.
6. Configuring the **Hot key** for the New **Find Tool**

A new Find Tool has been introduced in this release hence it is not possible to open the Find Tool by using the **Ctrl + F** hot key. To configure the **Ctrl + F** hot key for the new Find Tool:

 - a. Open Hot keys aspect for any workplace in the workplace structure.
 - b. Select Ctrl + F hot key in the hot keys list and then remove.
 - c. Add the hot key by entering the combination Ctrl + F in the hot key area with context **global** and with Action **Execute Verb**.
 - d. In Aspect, navigate to the Global verbs aspect in the **Web system workplace**.
 - e. From Verb select **Show_FindTool**.
 - f. Add the newly configured Find Tool Hot key in the hot keys list aspect.