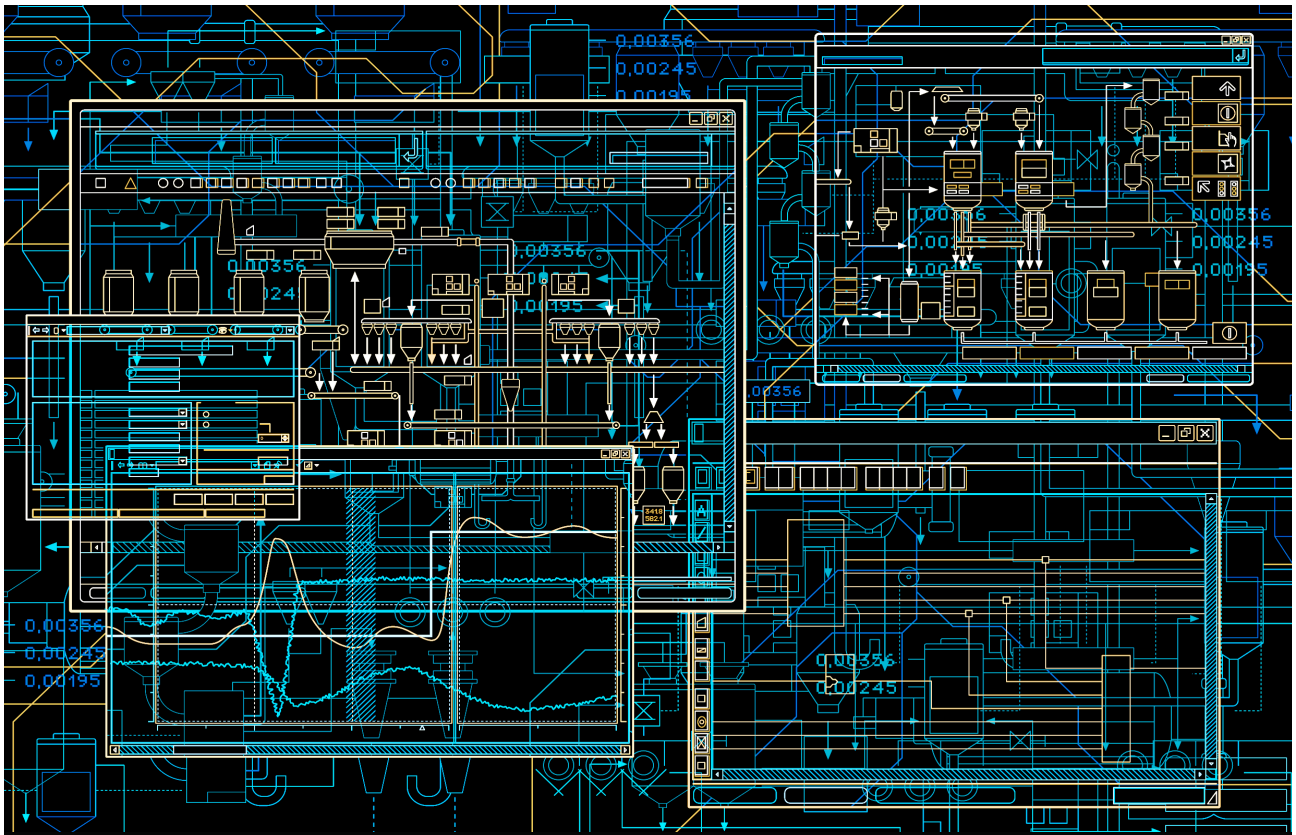

System 800xA

Public Address System
User Manual

System Version 6.0

Power and productivity
for a better world™

System 800xA

Public Address System
User Manual

System Version 6.0

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Table of Contents

User Manual Conventions 3
Feature Pack 3
Warning, Caution, Information, and Tip Icons 4
Terminology 4
Released User Manuals and Release Notes 5

Section 1 - Introduction

System Overview 7

Section 2 - Installation and Configuration

PAS Connectivity Service Provider Node 12
Security Permissions 14
PAS Information Aspect 20
PAS Global Setting Aspect 22
Alarm and Event List (Alarm Grouping) 26
PAS Configuration Aspect 27
PAS Announcement Aspect 30
Sound Scheme 32

Section 3 - Typical Plant Configurations

Configuring Announcement Messages 33
Scenario 1 33
Option 1 33
Option 2 37
Scenario 2 40
Scenario 3 41

Section 4 - Runtime Operations

Appendix A - Manual Installation

Overview 47
Windows Firewall Settings 47
Node Based Installations 48
Install Acapela Software 49
Verify Installation 53
Install ABB PAS Announcement Server 54
Verifying Installation 59
Verify PAS Announcement Service 60
Install ABB PAS Connectivity 61
Verify Installation 65
Post Installation 66
Load System Extension 66
Verify PAS System Extensions 70

Index

About This User Manual

Any security measures described in this User Manual, for example, for user access, password security, network security, firewalls, virus protection, etc., represent possible steps that a user of an 800xA System may want to consider based on a risk assessment for a particular application and installation. This risk assessment, as well as the proper implementation, configuration, installation, operation, administration, and maintenance of all relevant security related equipment, software, and procedures, are the responsibility of the user of the 800xA System.

This user manual describes the Installation and Configuration of *ABB 800xA Public Address System* in 800xA System.

User Manual Conventions

Microsoft Windows conventions are normally used for the standard presentation of material when entering text, key sequences, prompts, messages, menu items, screen elements, etc.

Feature Pack

The Feature Pack content (including text, tables, and figures) included in this User Manual is distinguished from the existing content using the following two separators:

Feature Pack Functionality

<Feature Pack Content>

Feature Pack functionality included in an existing table is indicated using a table footnote (*):
*Feature Pack Functionality

Unless noted, all other information in this User Manual applies to 800xA Systems with or without a Feature Pack installed.

Warning, Caution, Information, and Tip Icons

This User Manual includes Warning, Caution, and Information where appropriate to point out safety related or other important information. It also includes Tip to point out useful hints to the reader. The corresponding symbols should be interpreted as follows:

Electrical warning icon indicates the presence of a hazard that could result in *electrical shock.*

Warning icon indicates the presence of a hazard that could result in *personal injury.*

Caution icon indicates important information or warning related to the concept discussed in the text. It might indicate the presence of a hazard that could result in *corruption of software or damage to equipment/property.*

Information icon alerts the reader to pertinent facts and conditions.

Tip icon indicates advice on, for example, how to design your project or how to use a certain function

Although Warning hazards are related to personal injury, and Caution hazards are associated with equipment or property damage, it should be understood that operation of damaged equipment could, under certain operational conditions, result in degraded process performance leading to personal injury or death. Therefore, fully comply with all Warning and Caution notices.

Terminology

A complete and comprehensive list of Terms is included in the *System 800xA System Guide Functional Description (3BSE038018*)*. The listing includes terms and definitions that apply to the 800xA System where the usage is different from

commonly accepted industry standard definitions and definitions given in standard dictionaries such as Webster's Dictionary of Computer Terms. Terms that uniquely apply to this User Manual are listed in the following table.

Term/Acronym	Description
800xA	ABB automation system (eXtended Automation).
PAS	Public Address System

Released User Manuals and Release Notes

A complete list of all User manuals and Release notes applicable to System 800xA is provided in *System 800xA Released User Documents (3BUA000263*)*.

System 800xA Released User Documents (3BUA000263)* is updated each time a document is updated or a new document is released. It is in PDF format and is provided in the following ways:

- Included on the documentation media provided with the system and published to ABB SolutionsBank when released as part of a major or minor release, Service Pack, Feature Pack, or System Revision.
- Published to ABB SolutionsBank when a User manual or Release note is updated in between any of the release cycles listed in the first bullet.

A product bulletin is published each time *System 800xA Released User Documents (3BUA000263*)* is updated and published to ABB SolutionsBank.

Section 1 Introduction

ABB 800xA Public Address System is delivered as an add-on to the 800xA System for announcing the information, instructions and messages through the public address system to all plant personnel. 800xA Public Address System comprises of the following main node functions

- 800x PAS Connectivity
- 800xA PAS Announcement Node

System Overview

Figure 1 shows Public Address System in System 800xA Plant Network.

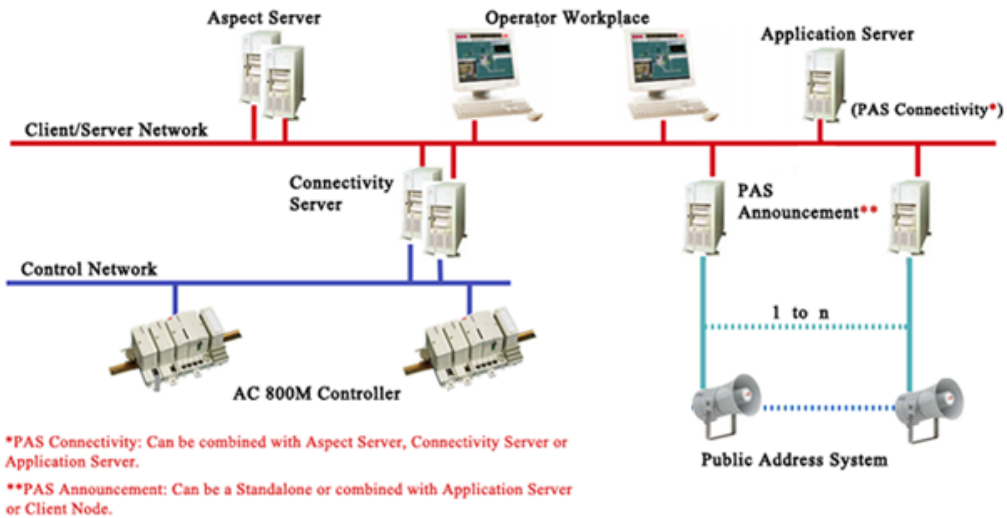

Figure 1. PAS in System 800xA Plant Network

Table 1 describes the PAS Components in 800xA System:

Table 1. PAS Components

PAS Components	Description
PAS Connectivity	PAS Connectivity is responsible for monitoring the Alarm Lists and adding the announcement messages to the announcement queue. There will be one PAS Connectivity Server per 800xA System. PAS Connectivity can be a dedicated Application Server or can be combined with any Application Server or Connectivity Server in the System. In addition, PAS Connectivity includes client components that will be installed in all 800xA nodes including Aspect Server (from where the system extension is loaded).
PAS Announcement	The PAS Announcement is responsible for picking messages from announcement queue, perform text to speech conversion and do the actual announcement via the output channel. There can be multiple PAS Announcement nodes in a system, typically corresponding to different plant areas. The PAS Announcement node can be combined with any 800xA node or can also be a non-800xA[1] Windows server or workstation node.
1) Incase of non-800xA node, installation has to be performed manually, refer Appendix A, Manual Installation.	

Section 2 Installation and Configuration

This section describes the Installation and Configuration steps required for *ABB 800xA Public Address System* (PAS) in 800xA System.

System Installer supports PAS. During installation, PAS is selected as a System Function (see Figure 2) and PAS Announcement Server is selected as a System Node (see Figure 3). For general requirements on installation and recommended hardware, refer *System 800xA Installation and Upgrade Getting (2PAA111708*)*.

Ensure that Public Address System is installed and System Extension is loaded into 800xA System.

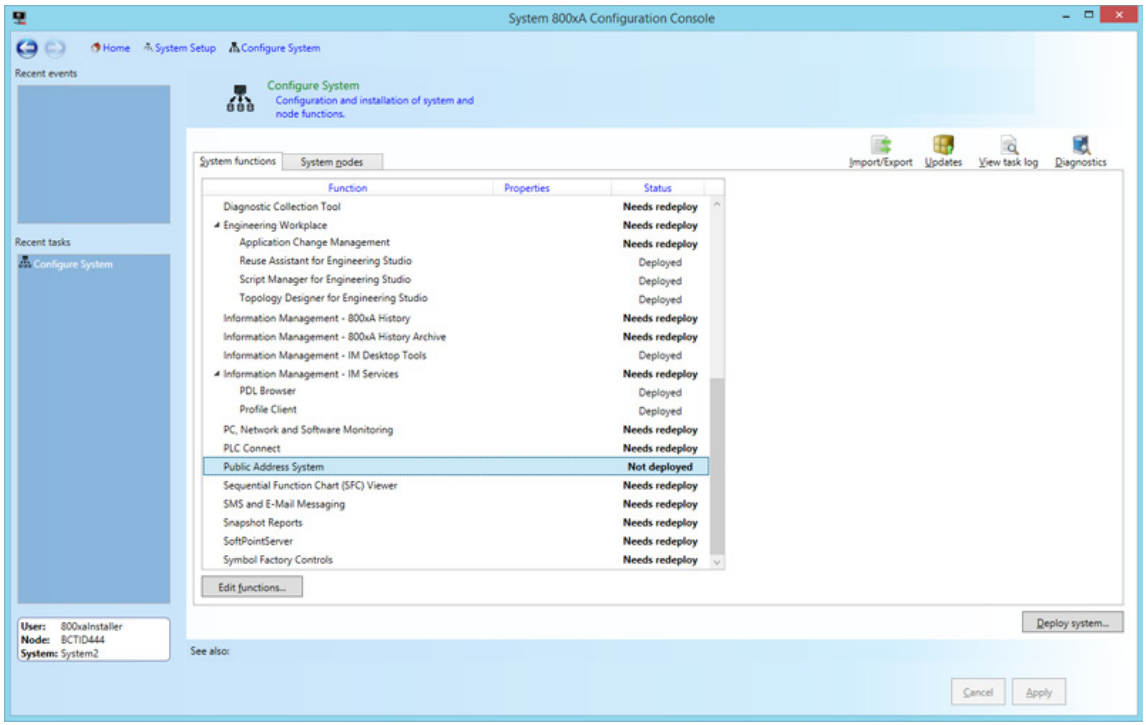

Figure 2. Public Address System - System Function

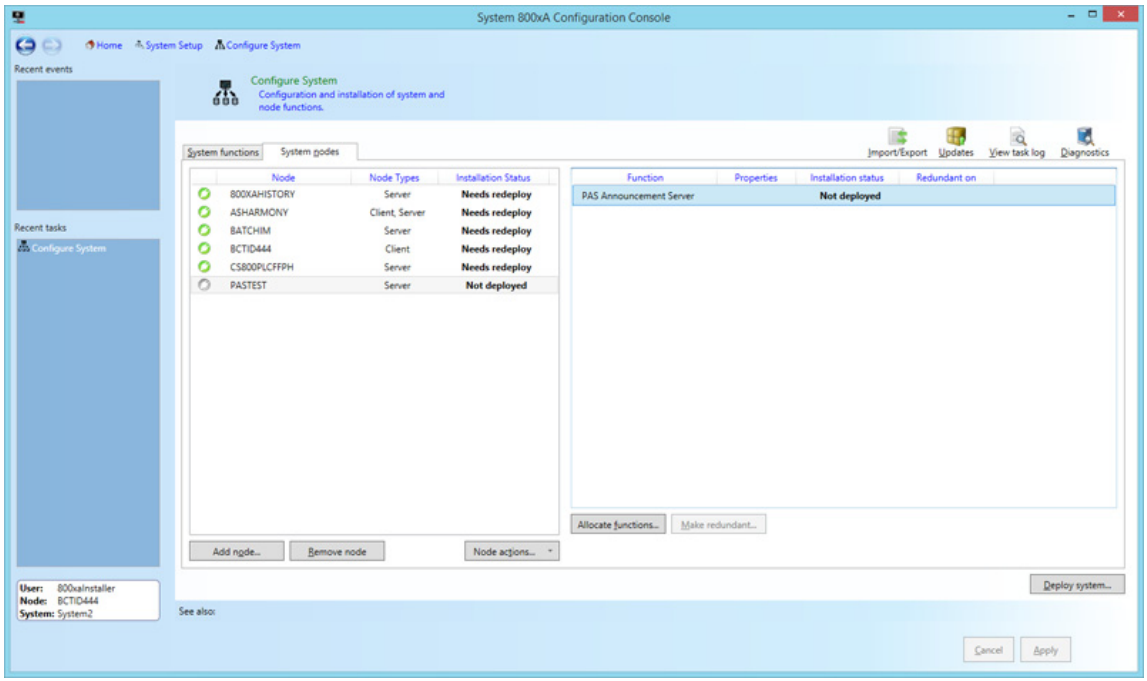

Figure 3. Public Address System - System Node

Figure 4 shows the configuration workflow for the Public Address System in 800xA System. Click on a box with blue text to take you to the associated procedure.

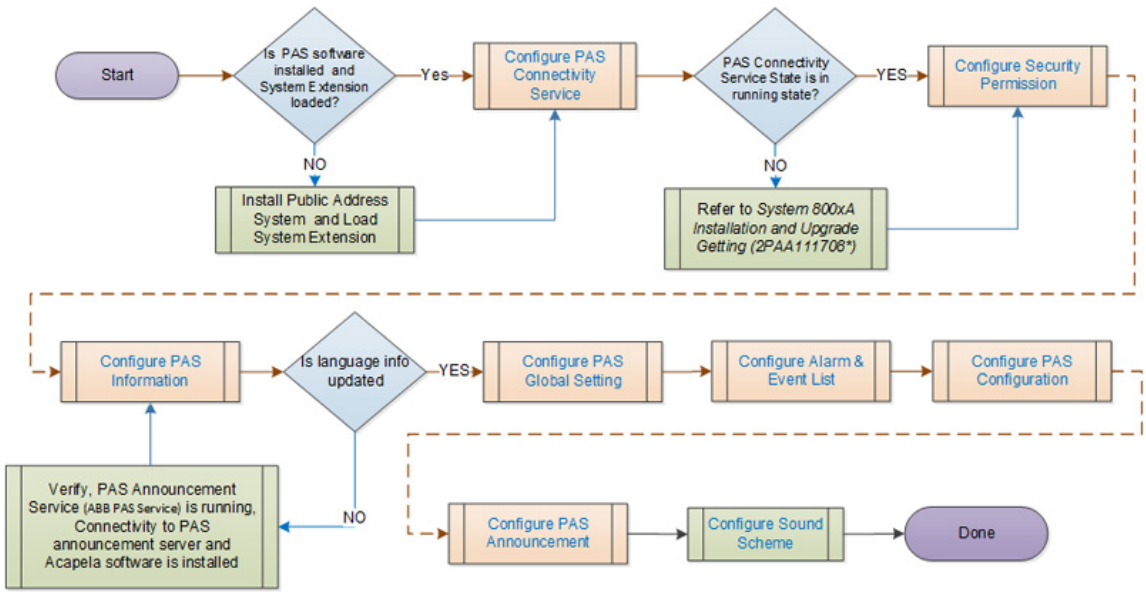

Figure 4. PAS Configuration Flow chart

PAS Connectivity Service Provider Node

Perform the following steps to set the PAS Connectivity Service Provider node:

1. Open **Plant Explorer Workplace** and navigate to **Service Structure**.
2. Use the object browser to navigate to and right click on;

   `Services > PAS_Manager_Service,Service`

3. Select **New Object** from the context menu to open a **New Object** dialog box.
4. Select **Service Group** from the list on the left, type a name and then click **Create**.
5. Use the object browser to navigate to and right-click on the newly created **Service Group**.

6. Select **New Object** from the context menu to open the **New Object** dialog box.
7. Select **Service Provider** from the list on the left, type a name and click **Create**.
8. Select **Service Provider Definition** in the aspect list area for the newly created **Service Provider**.
9. Select the node identified to host this **PAS Connectivity Service** from the Node: drop-down list box. There can only be one PAS Connectivity Service per System.
10. Click **Apply**. This will set the **Service Provider** host name for this **PAS Connectivity Server**.

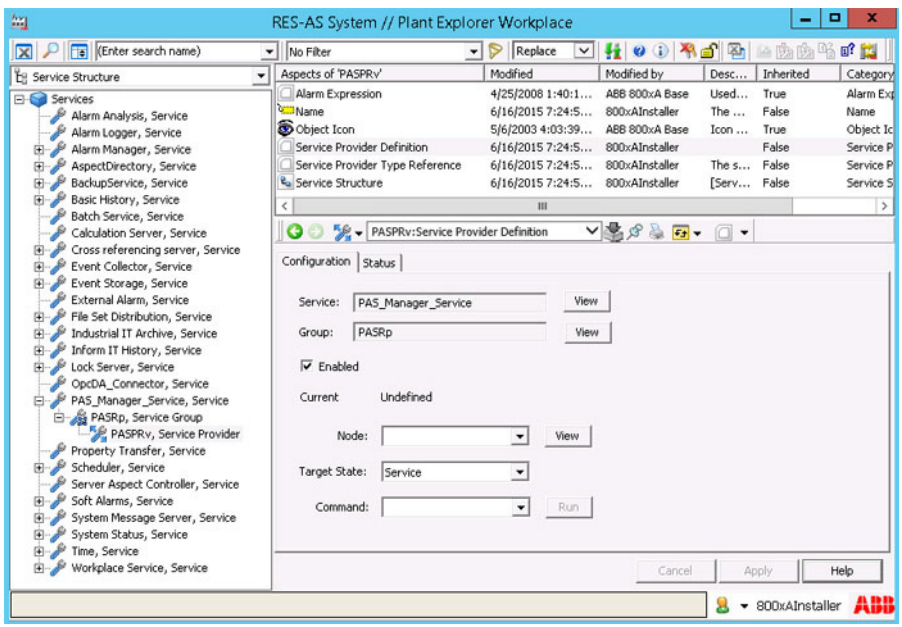

Figure 5. PAS Service Configuration

Security Permissions

The security permissions are configured under **Security Definition** aspect. To open this aspect, navigate to **Admin Structure > Administrative Objects > System Domain Name**.

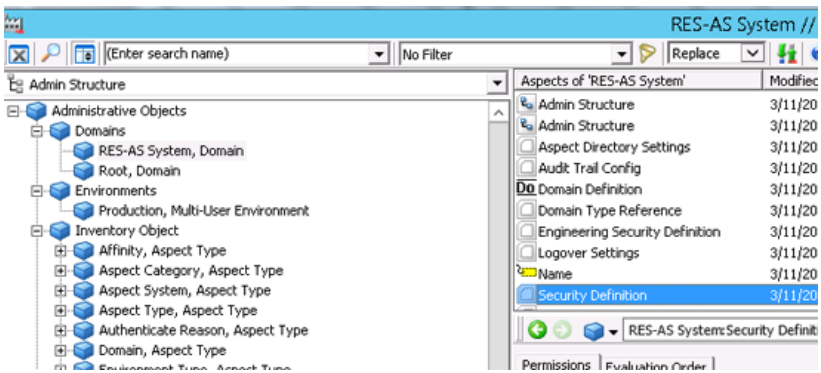

Figure 6. Security Definition Aspect

There are two permission required for a PAS user:

- **Configure**: By default Application Engineers are configured for this permission. Users with this permission can configure PAS Configuration aspect and PAS global Setting aspect.

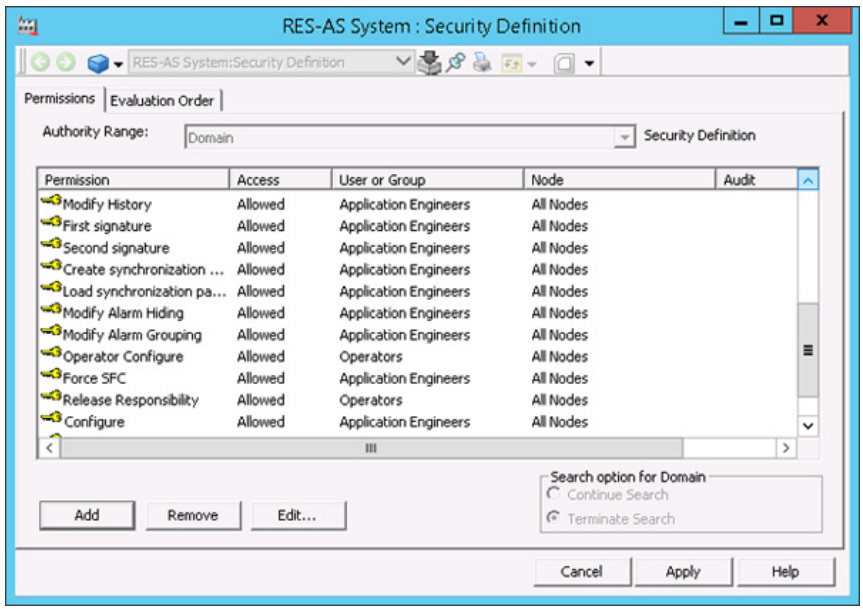

Figure 7. Security Definition aspect

- **PAS Announcement**: Users with this permission can perform operational tasks in the Announcement overview aspect during run time operations.

Perform the following for configuring PAS Announcement permission:

1. Open **Security Definition** aspect (see Figure 7).

2. Click **Add** to open the **Permission Configuration** window.

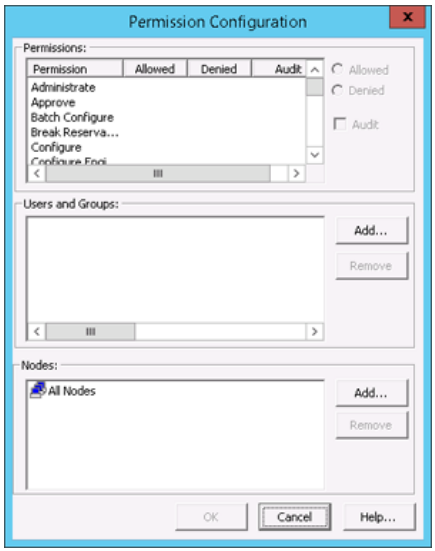

Figure 8. Permission Configuration

3. Select **PAS Announcement** and **Allowed** or **Denied** option and then click **Add** in **Add Users and Groups** pane.

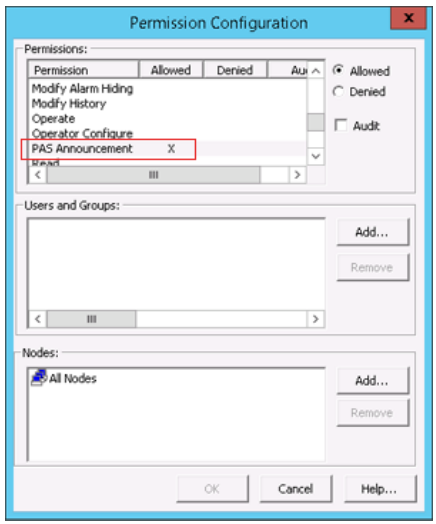

Figure 9. PAS Announcement Permission

4. Select the user type and then click **Add**. You can also add **Members** to this group.

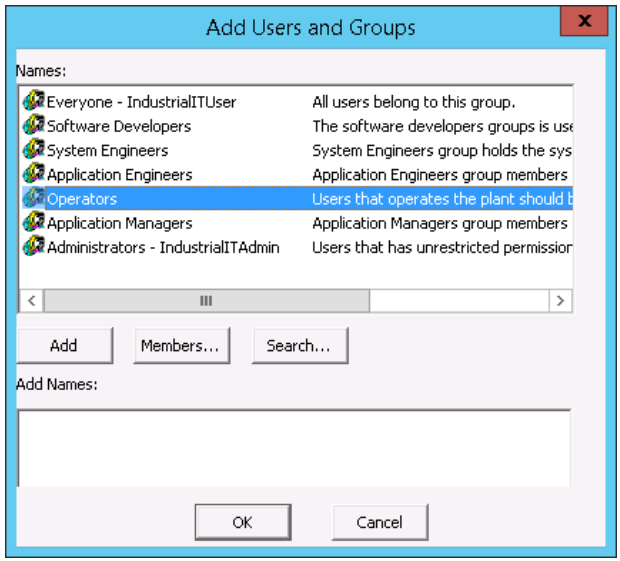

Figure 10. Add Users and Groups

5. The selected user type is added for this permission and then click **Ok**.

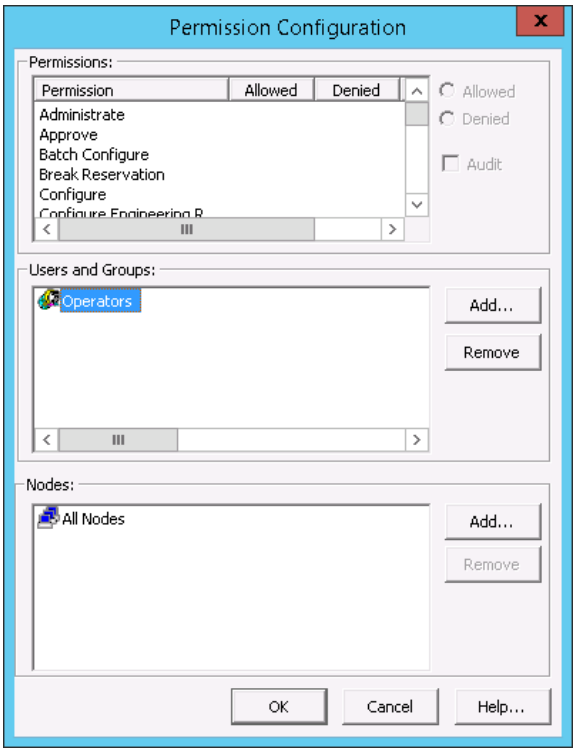

Figure 11. User Group

6. The permission for PAS Announcement is listed in Security Definition aspect. Click **Apply** to activate the Permission for the user.

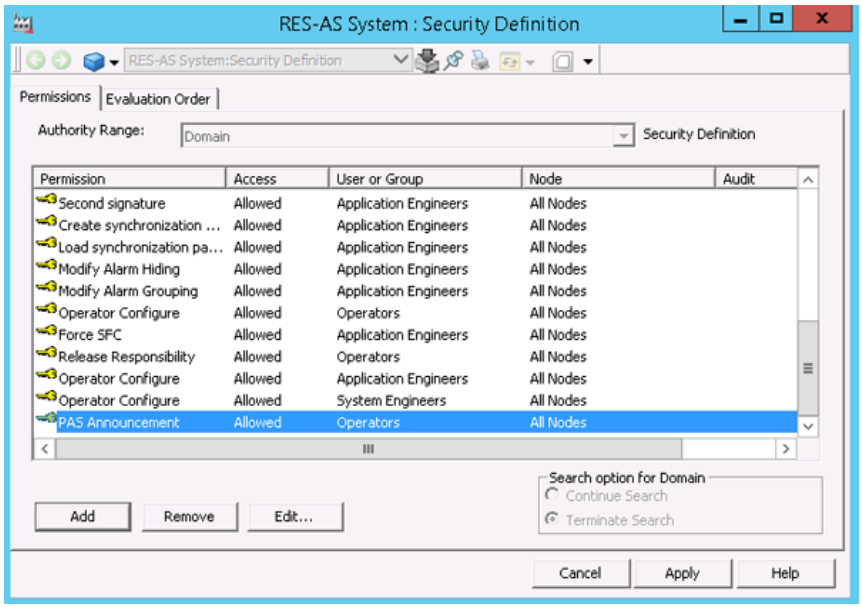

Figure 12. Security Definition- PAS Announcement

PAS Information Aspect

PAS information aspect is used for selecting the announcement node and to update the language and voice information from Acapela tool, which is installed on PAS announcement server.

Before preforming the steps, ensure that PAS announcement service is up and running.

Perform the following steps to create and configure PAS Information aspect in Admin Structure.

1. Open **Plant Explorer Workplace** and navigate to **Admin Structure**.
2. Use the object browser to navigate to and right click on;

`Administrative Objects > PAS Global Configuration`

3. Select **New Object** from the context menu to open the **New Object** dialog box.
4. Select the **List Presentation** option, select **PASInformation** aspect and then click **Create.**
5. In the PAS Information aspect window select the *PAS Announcement Node*, and then click **Update Language Info** to update the supported languages and then click **Apply**.

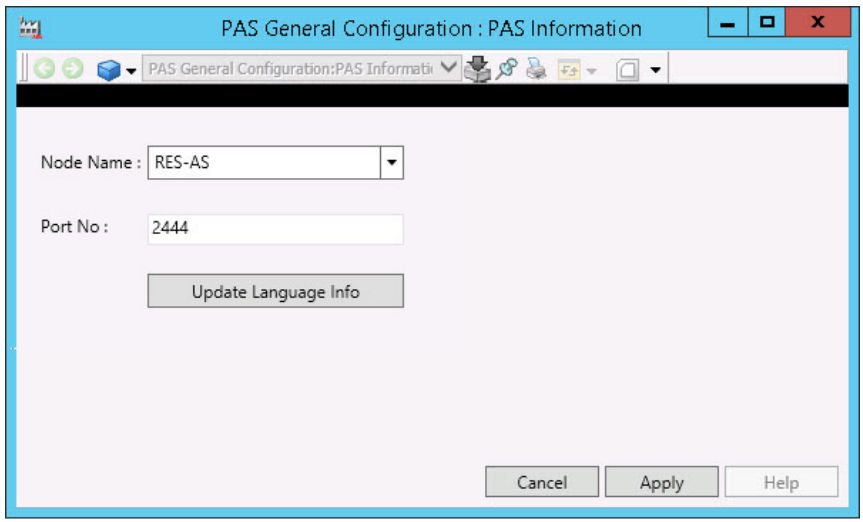

Figure 13. PAS Information Aspect

Update Language Info must be done first before creating the *PAS Global Setting* aspect, otherwise languages cannot be configured in *PAS Global Setting* aspect. This update must also be done each time a new language or a language package is added in the PAS system.

PAS Global Setting Aspect

PAS Global Setting aspect is used for configuring Voice settings and Announcement mode.

Only one instance of PAS Global Setting aspect must be configured in the System.

Perform the following steps to create and configure PAS Global Setting in Admin Structure.

1. Open **Plant Explorer Workplace** and navigate to **Admin Structure**.
2. Use the object browser to navigate to and right click on;

   `Administrative Objects > PAS Global Configuration`
3. Select **New Object** from the context menu to open the **New Object** dialog box.
4. Select the **List Presentation** option, select **PASGlobalSetting** aspect and then click **Create**.
5. In the **PAS Global Setting** aspect window configure the following tabs:

a. Configure **System and Hardware Settings** tab.

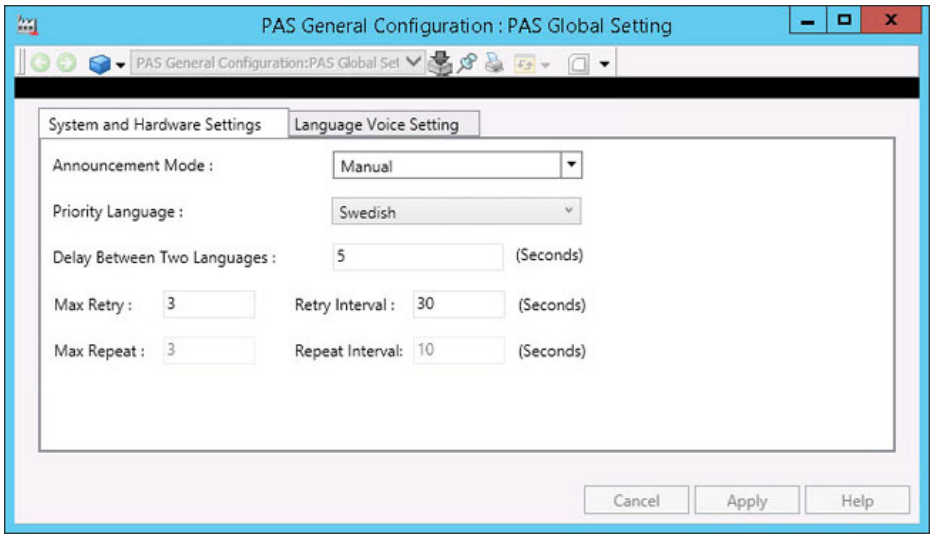

Figure 14. PAS Global Setting aspect - System and Hardware Settings

Item	Description
Announcement Mode	The mode in which the announcement is made. • **Manual**: If selected, the announcement is manually done using the announcement overview aspect. • **Automatic**: if selected, the announcement is made as soon as the alarm is generated. PAS Connectivity service must be restarted, if user changes the mode of announcement on a running system.
Priority Language	The priority of the language for the announcement.
Delay Between Two Languages	Time interval (seconds) between two language announcements.

Item	Description
Max Retry	Number of retries during failure of the announcement. This is applicable only in case of manual mode.
Retry Interval	Time interval (seconds) for a retry, during failure of the announcement. This is applicable only in case of manual mode.
Max Repeat	Number of repeats of announcements.This is applicable only in case of automatic mode.
Repeat Interval	Time interval (seconds) between two repeats.This is applicable only in case of automatic mode.

b. Configure **Language Voice Settings**.

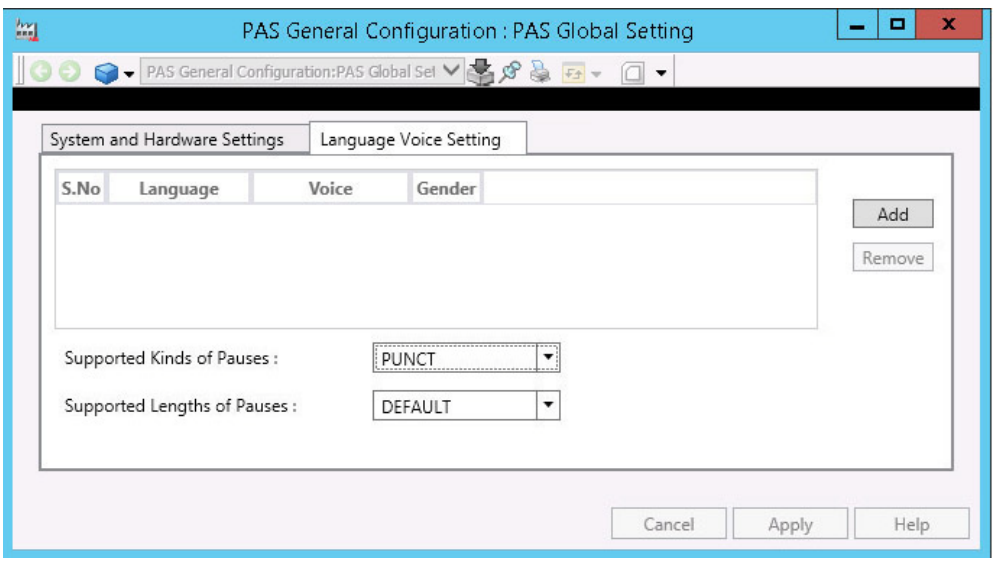

Figure 15. PAS Global Setting aspect - Language Voice Settings

Item	Description
Add	Click **Add** to select the language along with the corresponding voice. The Gender is automatically displayed and non editable. German, Swedish and US English languages are only supported.
Remove	Click **Remove** to delete the selected language along with the corresponding voice.
Supported Kinds of Pauses	The voice is paused based on the parameter selected from the list. Select the following kind of pauses from the drop down: • Punct • Semicolon • Comma • Bracket • Spell
Supported Lengths of Pauses	The length of text is paused based on the parameters selected from the list. Select the following length of pauses from the drop down: • Default • Very short • Short • Medium • Long • Very Long

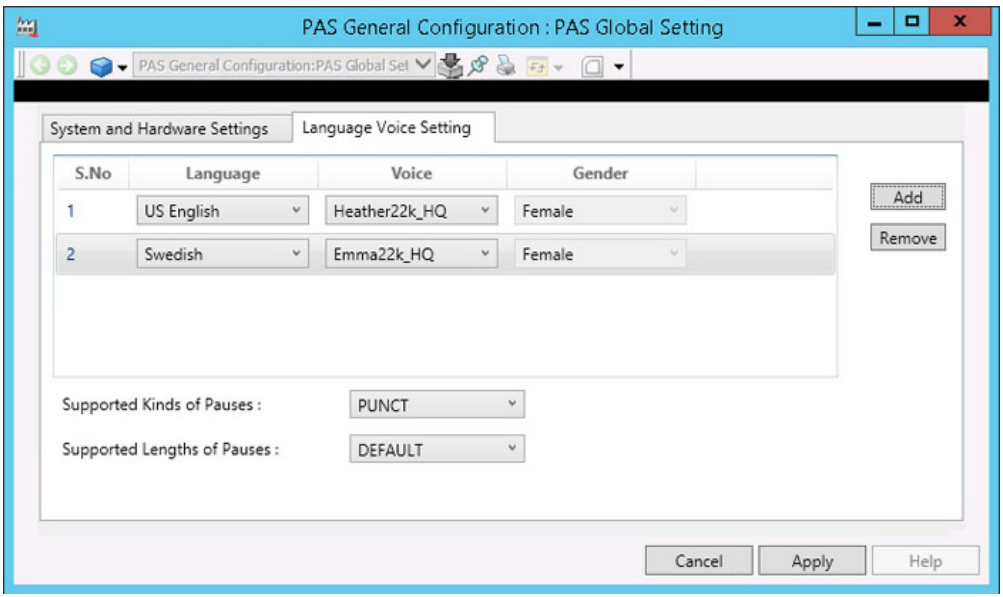

Figure 16. Language Voice Settings

6. Click **Apply** to save the changes.
   Re-open the *PAS Global Configuration* aspect to verify if the updated values are reflected.

Alarm and Event List (Alarm Grouping)

To make Public Address System operational, it is necessary to configure Alarm and Event list in 800xA System.

The Alarm and Event Lists are used to group alarms together. They define the list of Alarms and Events being sent as an announcement message. Alarm and Event List are part of the 800xA system and are added to the objects while creating applications. For more information on Alarm and Event configuration, refer to the *System 800xA Configuration (3BDS011222)* manual.

PAS Configuration Aspect

PAS Configuration aspect is used to configure announcement details for Alarm and Event list aspects on a particular object.

Perform the following steps to create and configure PAS Configuration aspect:

1. Open **Plant Explorer Workplace** and navigate to a desired object.
2. Right click on an object and select **New Aspect** from the context menu to open the **New Aspect** dialog box.
3. Select the **List Presentation** option, select **PASConfiguration** aspect and then click **Create**.
4. In the PAS Configuration aspect configure the following tabs:

   Configured Alarm and Event tab:

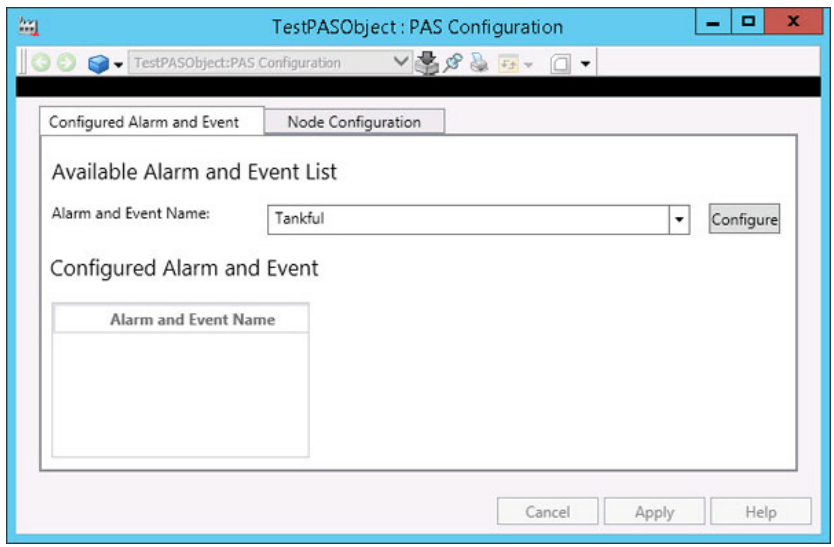

Figure 17. Configured Alarm and Events

Configured Alarm and Event list aspect in the selected object will be listed in the **Alarm and Event Name** drop down for PAS announcement.

a. Select the Alarm and Event list aspect from the **Alarm and Event Name** drop down field.

b. Click **Configure** for selected Alarm and Event list to appear in **Configured Alarm and Event Name** pane**.**

c. Click **Add**, the announcement is made in the language added for the Alarm and Event list.

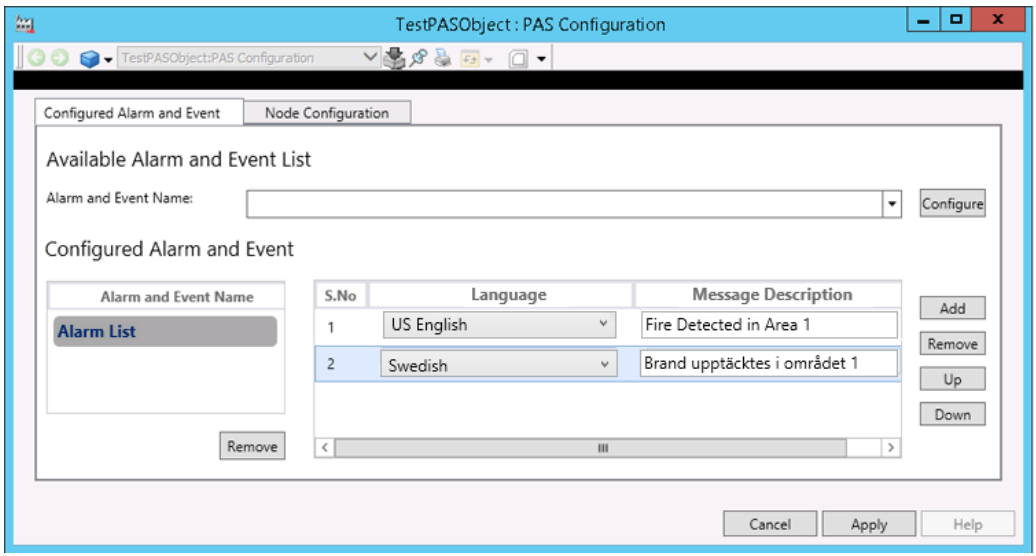

Figure 18. Configured Alarm and Events

Item	Description
Configure	Select an Alarm or Event from the *Available Alarm and Event List* and then click **Configure**. The Alarm and Events appear in *Configured Alarm and Event* pane for configuring language and message description.
Add	Click **Add** to create one or multiple **Alarm** description for multiple languages
Remove	Click **Remove** to remove the selected **Alarm** description.

Item	Description
Up	Announcement for the selected language and message description is incrementally prioritized.
Down	Announcement for the selected language and message description is prioritized low.

Select **Node Configuration** tab:

a. Select the announcement node from the drop down list and then click **Apply**.

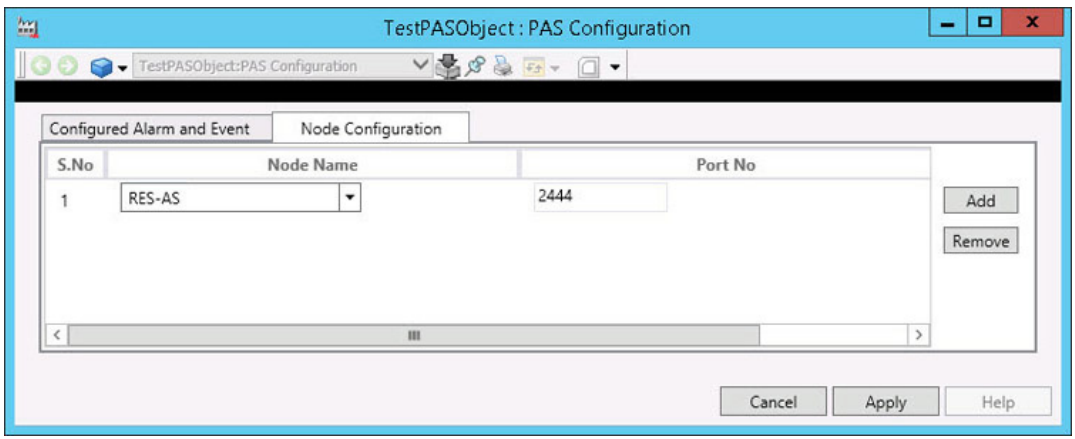

Figure 19. Node Configuration

Label	Description
Add	Add a Node name and provide the port number of the Node.
Node Name	Initially all 800xA System nodes are listed in the Drop down box. User can select any one as an announcement node. User can manually type the node to configure non 800xA node as an announcement node.
Port No.	Enter the port no. on which the PAS announcement service is running, by default the number is 2444. The range is between 1 - 9999.

PAS Announcement Aspect

PAS Announcement aspect display the list of announcement, details and their status of Alarm and Event at any point of time. This aspect can be created under any object in plant explorer.

1. Open **Plant Explorer Workplace** and navigate to a desired object.
2. Right click on an object and select **New Aspect** from the context menu to open the **New Aspect** dialog box.
3. Select the **List Presentation** option, select **PASAnnouncement** aspect and then click **Create** to view *PAS Announcement overview* window.

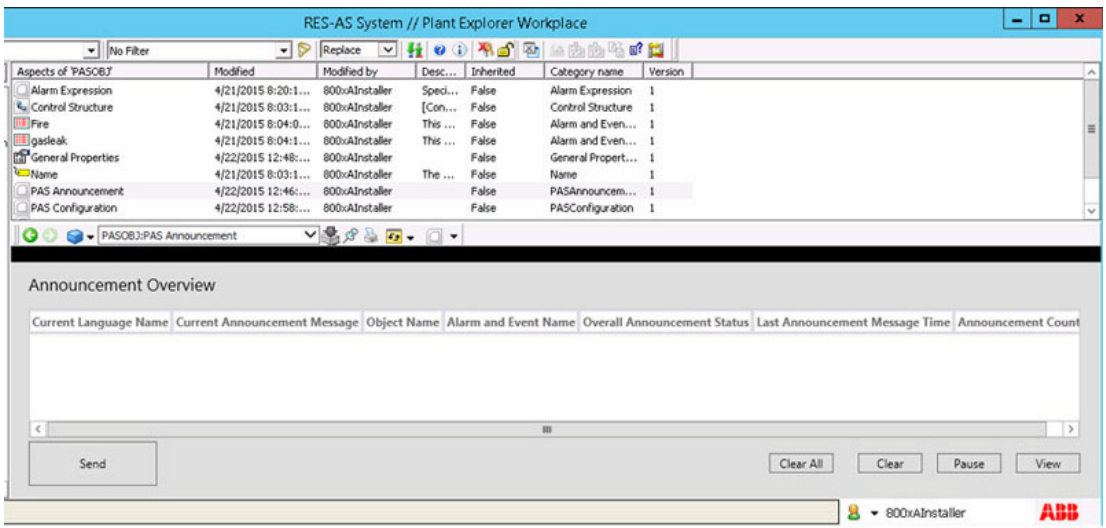

Figure 20. PAS Announcement Aspect - Main View

4. Click to swap the Announcement overview from *Main* view to *Config* view.

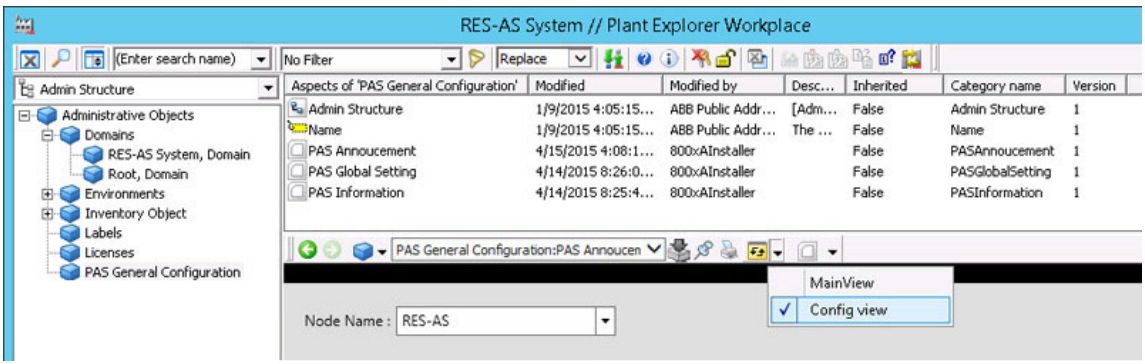

Figure 21. PAS Announcement Aspect - Config View

5. In **Config view**, select the **Announcement Node** and then click **Apply**. Announcement pertaining to this node is only listed in the Announcement overview aspect.

This configuration must be done at least once before viewing the announcement overview aspect for a particular node. This configuration can be modified in case user wants to view announcements from other nodes.

Sound Scheme

In Announcement server node **Sound Scheme** must be configured.

1. Navigate to **Control Panel > Sound** or Right click from Notification area to open **Sound** properties window. Select **Sound Scheme** as **No sounds** (see Figure 22).

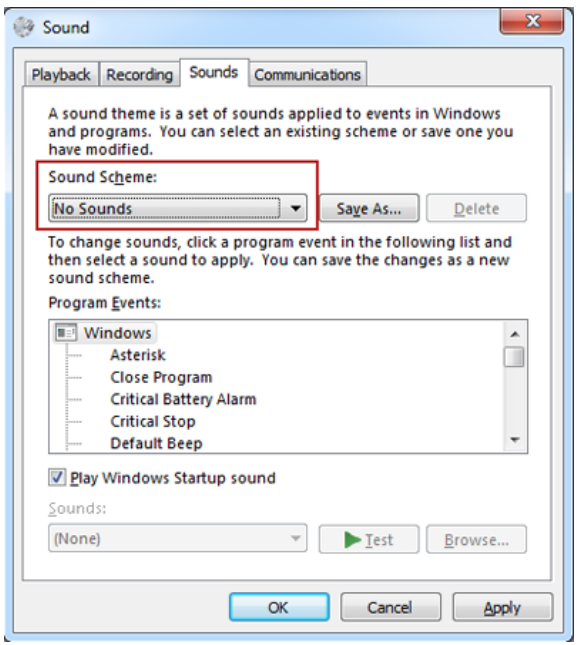

Figure 22. Sound Scheme

Section 3 Typical Plant Configurations

This chapter describes a typical plant configuration using PAS *ABB 800xA Public Address System* in 800xA System.

Configuring Announcement Messages

User can perform PAS configuration based on the announcement message requirement and the plant layout. Following scenarios depicts the different possible ways to configure PAS.

Scenario 1

Announcement Message configuration can be performed in two different ways.

- Option 1 - **One-to-One**: Each signal is configured with different announcement message.
- Option 2 - **Many-to-One**: More than one signal is configured to send announcement message.

Option 1

Each signal to be announced is configured with PAS Configuration aspect containing corresponding announcement message.

In the following example, there are four signals, FD1_FireDetector1, FD2_FireDetector2, GD1_GasDetector1, and GD2_GasDetector2 for which announcement has to be made. As announcement message is different, a separate PAS Configuration Aspect is configured for each signal.

Figure 23 shows signal for Fire Detection (FD1_FireDetector1) with PAS configuration aspect configured for sending its corresponding announcement message **Fire Detected in Zone 1**.

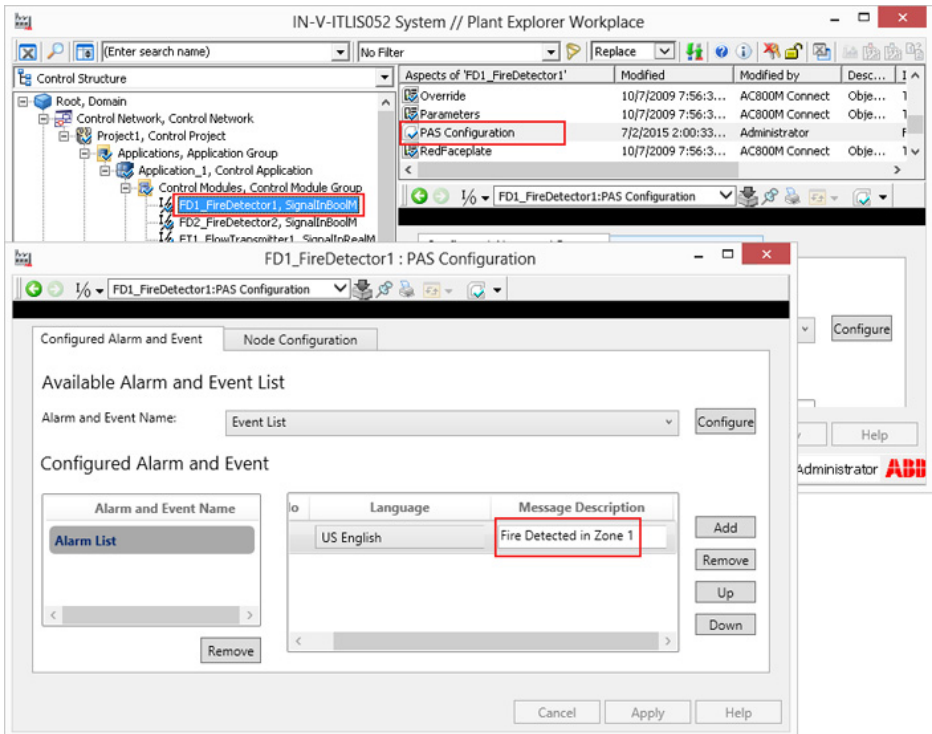

Figure 23. PAS Configuration for signal 1(Fire Detection)

Figure 24 shows signal for Fire Detection (FD2_FireDetector2) with PAS configuration aspect configured for sending its corresponding announcement message **Fire Detected in Zone 2**.

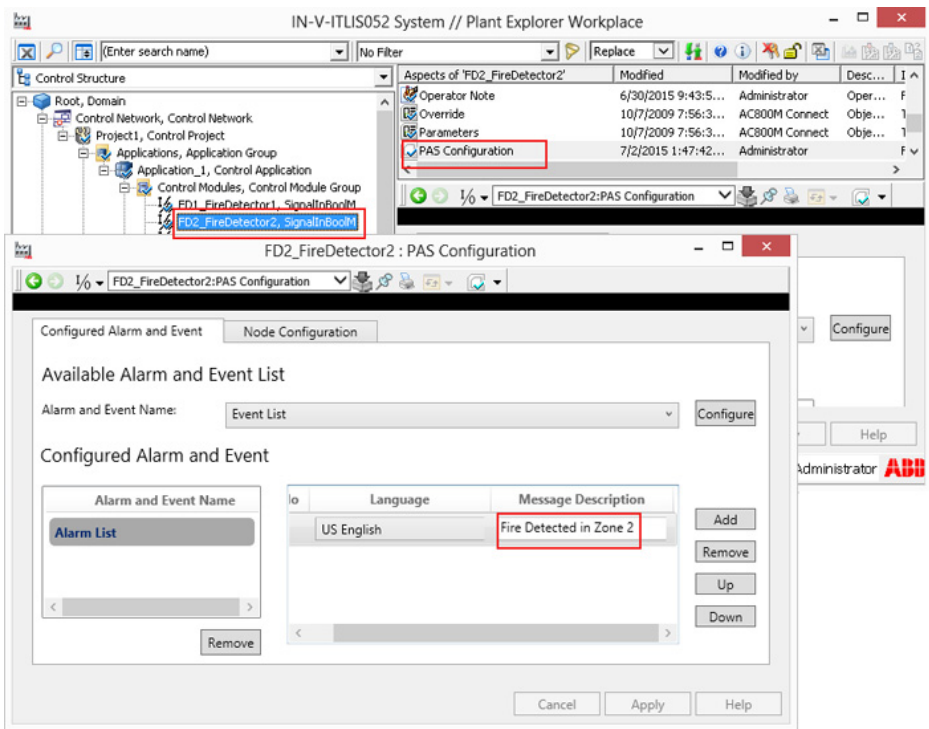

Figure 24. PAS Configuration for signal 2(Fire Detection)

Figure 25 shows signal for Gas Detection (GD1_FireDetector1) with PAS configuration aspect configured for sending its corresponding announcement message **Gas Detected in Zone 1**.

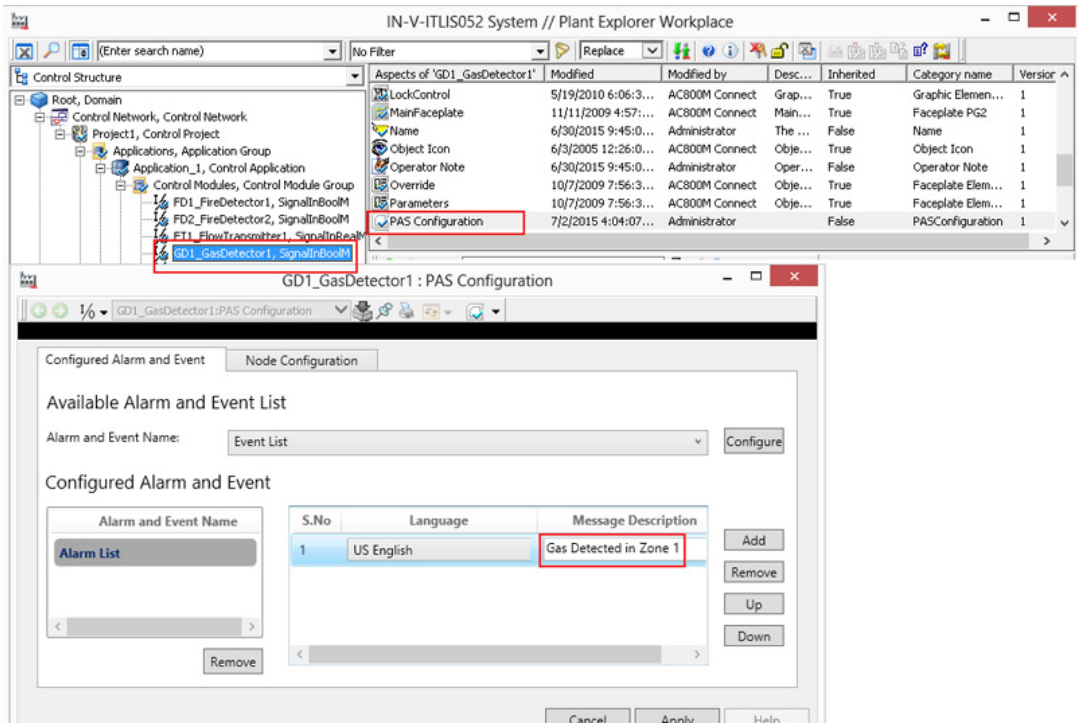

Figure 25. PAS Configuration for signal 1(Gas Detection)

Figure 26 shows signal for Gas Detection (GD2_FireDetector2) with PAS configuration aspect configured for sending its corresponding announcement message **Gas Detected in Zone 2.**

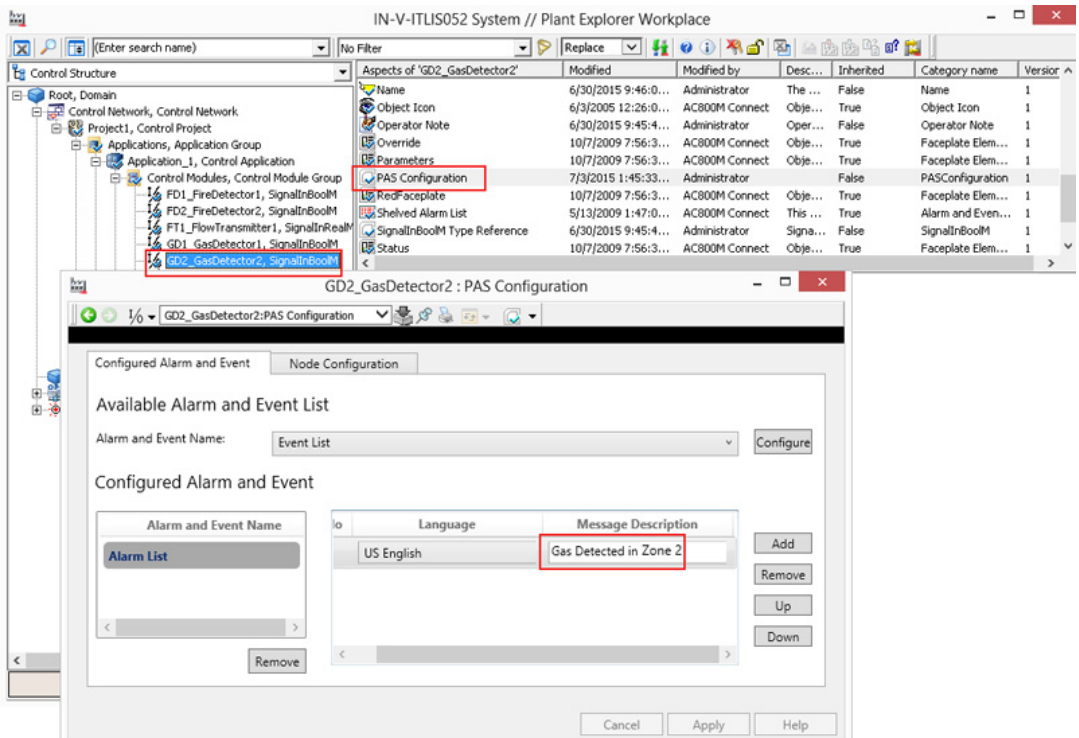

Figure 26. PAS Configuration for signal 2(Gas Detection)

Option 2

Signals to be announced can be grouped and configured with a single PAS Configuration aspect containing an announcement message.

In the following example, the signals, FD1_FireDetector1 and FD2_FireDetector2 are grouped under object **Fire Detectors** (using Insert Object) configured with PAS Configuration aspect containing an announcement message.

Similarly, the signals GD1_GasDetector1 and GD2_GasDetector2 are grouped under object **Gas Detectors** (using Insert Object) configured with PAS Configuration aspect containing an announcement message.

The parent objects (**Fire Detectors** and **Gas Detectors)** needs to be configured with an Alarm List and its filter set to **Object and descendents**.

Figure 27 and Figure 28 shows signals grouped under parent objects where a single PAS configuration aspect is configured.

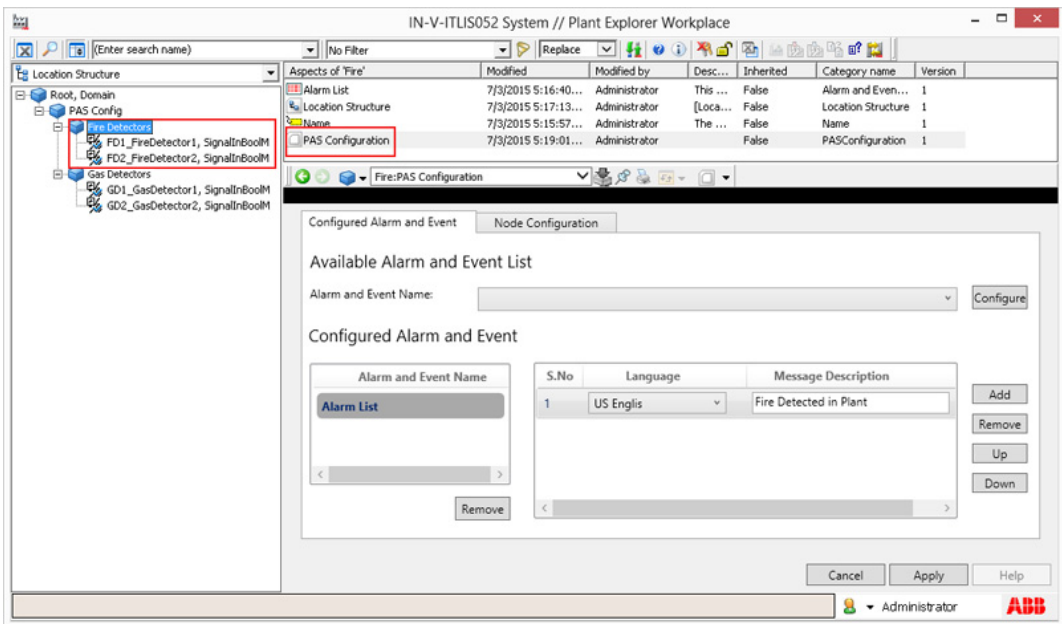

Figure 27. PAS Configuration for Fire Detectors

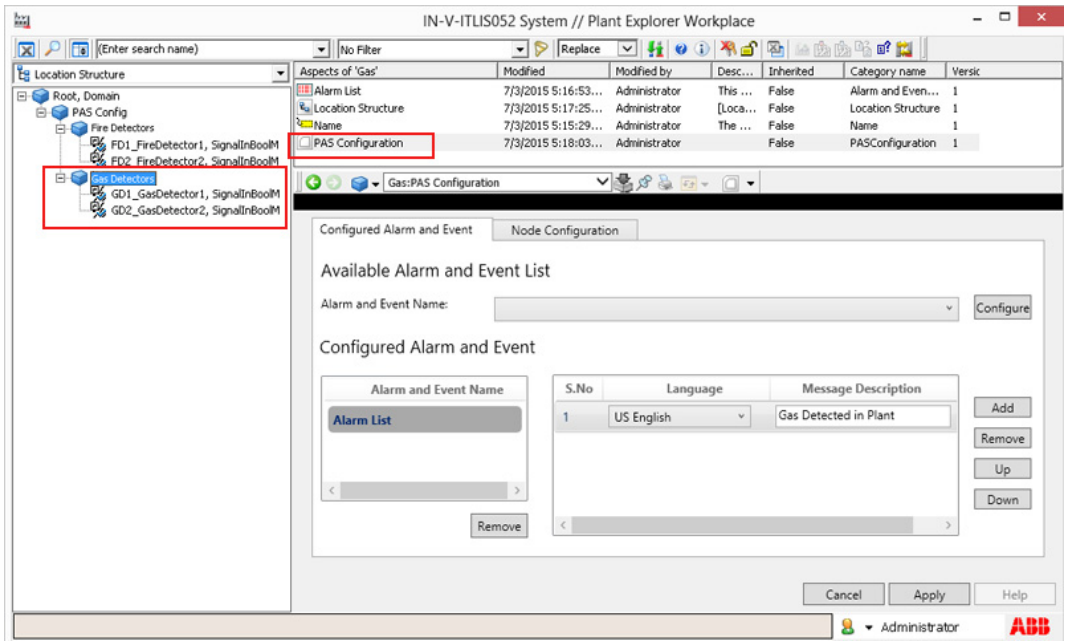

Figure 28. PAS Configuration for Gas Detectors

Scenario 2

Announcement message configured in a PAS Configuration aspect for a signal can be announced through multiple announcement nodes.

Figure 29 shows signal for Fire Detection (FD1_Firedetector1) with PAS configuration aspect configured for sending its corresponding announcement message **Fire Detected in Zone 1** through announcement nodes **Node1** and **Node 2**.

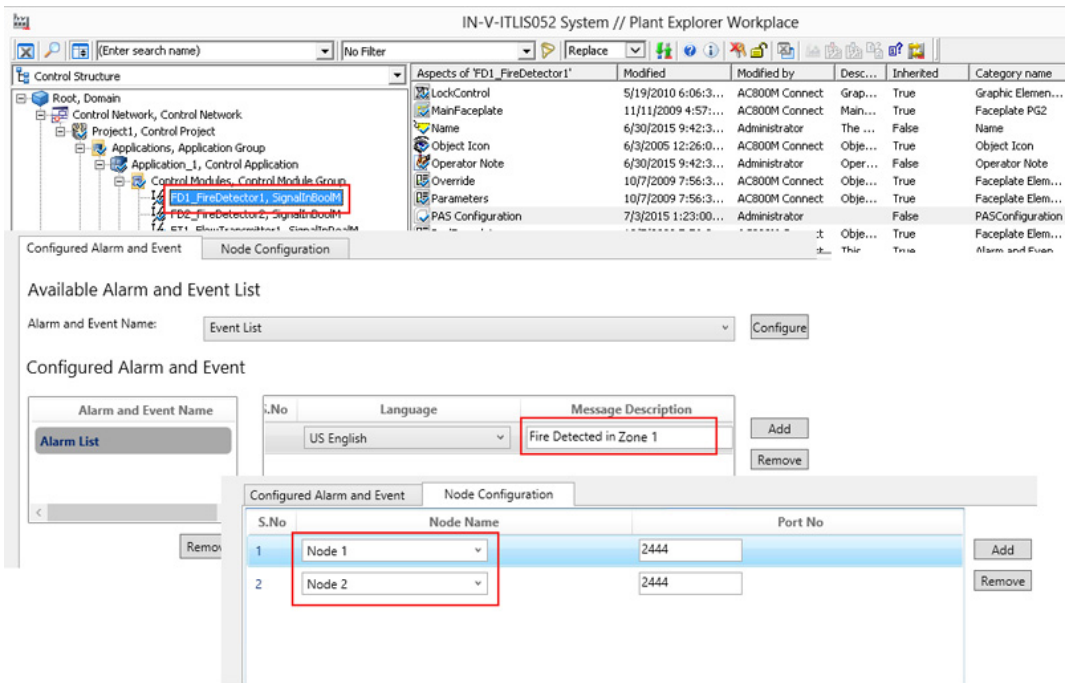

Figure 29. Multiple Node configuration - Announcement message

Scenario 3

Announcement message configured in a PAS Configuration aspect for a signal can be announced through a dedicated announcement node.

Figure 30 shows signal for Fire Detection (Application_1\FD_Firedetector) with PAS configuration aspect configured for sending its corresponding announcement message **Fire Detected in Area 1** through announcement node **Node1** pertaining to a plant area.

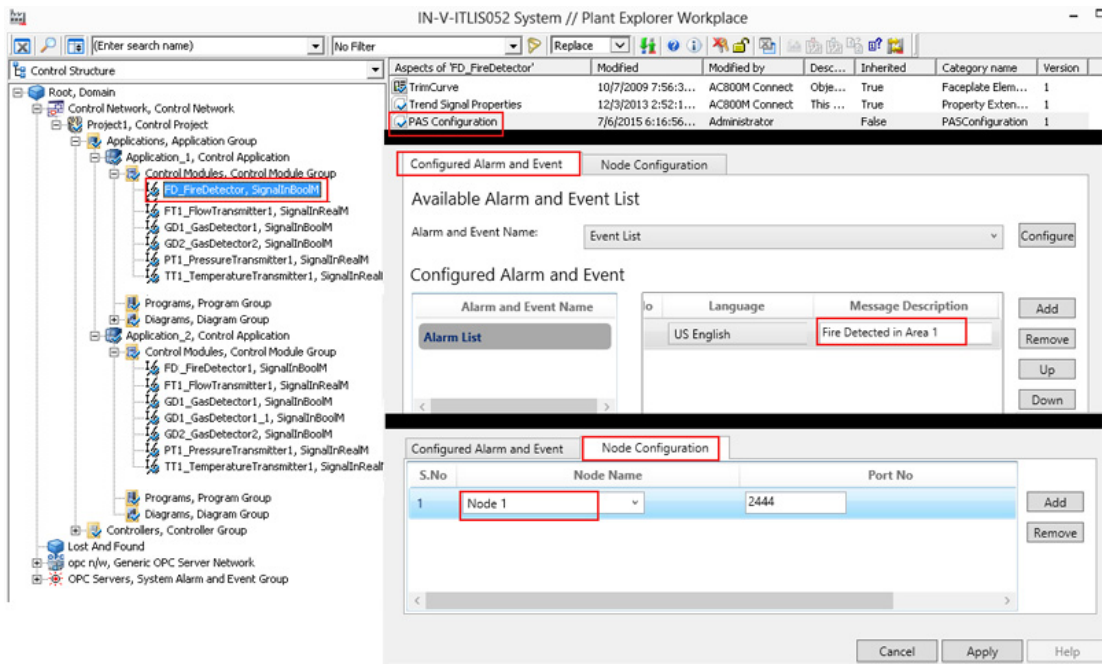

Figure 30. Announcement message to Node 1, Area 1

Figure 31 shows signal for Fire Detection (Application_2\FD1_FireDetector1) with PAS configuration aspect configured for sending its corresponding announcement message **Fire Detected in Area 2** through announcement node **Node 2** pertaining to another plant area.

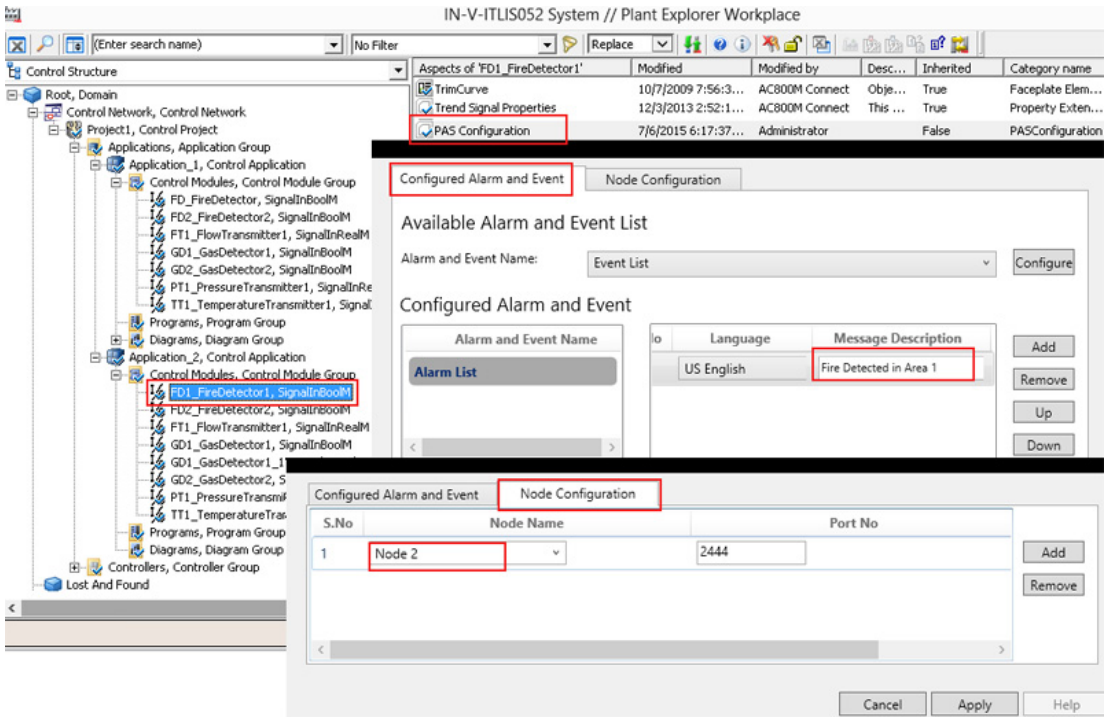

Figure 31. Announcement message to Node 2, Area 1

Section 4 Runtime Operations

This section describes the run time operations of *ABB 800xA Public Address System* in 800xA System.

Generate an Alarm and verify that the Announcement is made on your speakers

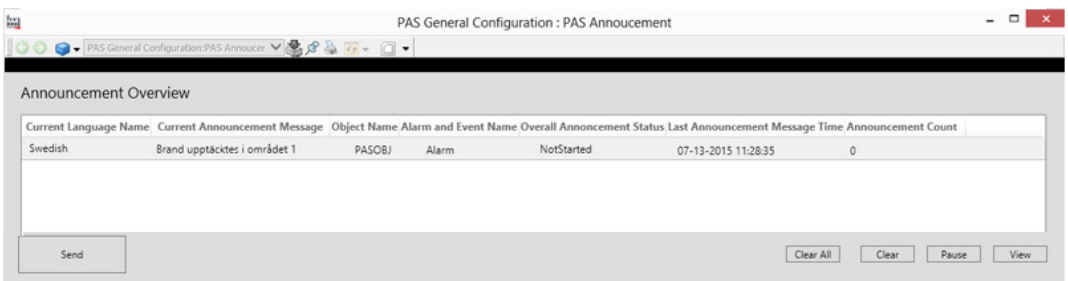

Figure 32. PAS Announcement Aspect Overview

Label	Description
Send	Send the selected message from the list of the announcement.
Clear All	Clears all the messages from the list view.
Clear	Clear the selected message from the list.

Label	Description
Pause	The selected message is paused from sending to public address system. When a selected message is paused, the message is skipped from making an announcement and the overall status message is **pause**. In an Automatic mode if overall status message is **completed**, then the announcement message will be skipped. User cannot pause a message that is in progress (ongoing announcement). That particular message is paused only after the announcement is completed.
Activate	The message is active and is ready for the announcement. The Overall Announcement Status column indicates **NotStarted**. This status indicates that a new message has arrived.
View	Click **View** to see the ongoing announcement in multiple languages (see Figure 33) and the status of the remaining announcements.

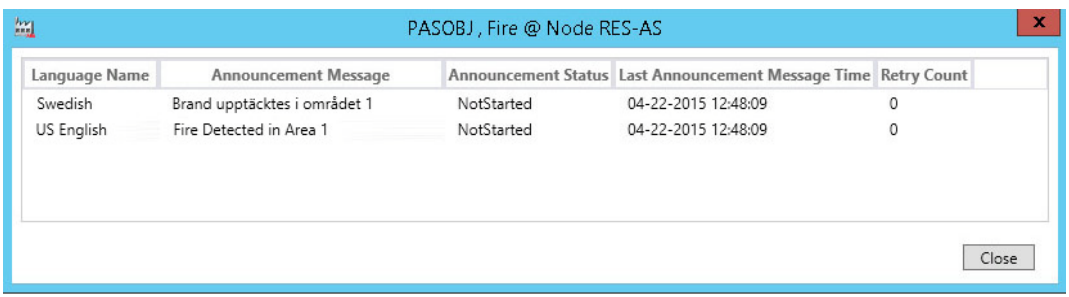

Figure 33. PAS Announcement Aspect Detailed Info

The state diagram (see Figure 34) shows different announcement status displayed, before an announcement message is made to the public address system.

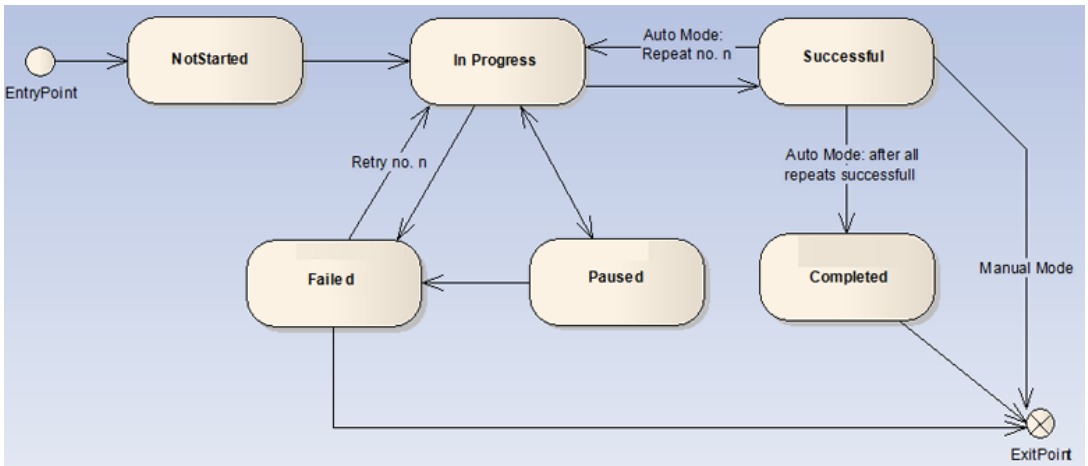

Figure 34. A Typical State Diagram showing Announcement Status

Announcement State	Description
Not Started	This is the initial state of the announcement
In Progress	The announcement moves from “Not Started” to “In Progress” when announcement is initiated. In auto mode, the announcement is initiated automatically while in manual mode it is initiated by clicking the Send button. From this state, the announcement can move to various different states: • If announcement is successfully done, the state changes to “Successful”. • If announcement fails due to some reason, the State changes to the “Failed” state. • If a Pause button is clicked, the announcement changes to the “Paused” State.

Announcement State	Description
Successful	From this state, the announcement can move to various different states: • In automatic mode the announcement repeats n times where the n is the specified number of repeat count where as in manual mode the announcement can be repeated by clicking on the Send button. In case of Repeat the announcement moves to “In Progress”. • When the Specified number of Repeats are successfully done in the automatic mode, the announcement moves to the “Competed” State. • Successful is the logical end of the announcement state in case of the Manual mode.
Failed	In this state, announcement can be retried in automatic mode, whereas in manual mode, announcement can be sent again. In both the cases, the state may move to the “In Progress”.
Paused	In this state, an announcement can be activated using the Active button. If activated, In automatic mode the announcement goes to the “In Progress” automatically if the number of repeats are not done yet, where as in manual mode if the Send button is clicked the announcement moves to the “In Progress”.
Completed	This state is the logical end of the announcement state in Automatic mode.

Appendix A Manual Installation

This appendix is applicable only for manual installation of Public Address System (PAS).

Overview

Following needs to be planned for Public Address System:

- Install System 800xA and its dependencies as a pre-requisite for PAS.
- Identify a node (PAS Connectivity) that runs the PAS software and interact with the Event Service.
- Identify a node (PAS Announcement node) that interacts with the PAS having sound output support.

Windows Firewall Settings

The *PASService.exe* must be included in the Windows Firewall exception list on the PAS Connectivity node installed on the Application server. Similarly, the *PASServerHost.exe* must be included in the Windows Firewall exception list on the Announcement Server node.

The port that is in use for the Announcement Server, must be included in the TCP port exception list of the Windows Firewall on the announcement server node.

For example: If PAS Announcement server is configured to run on port 2444 (default), then this port must be included in the Firewall exception list on the Announcement Server node.

The Windows Firewall must be turned off. To perform this task:

This step is only applicable while performing manual installation of PAS announcement node, System extension on the aspect directory, and PAS service on the application server or connectivity server.

1. Start the **Run** command and run *Services.msc*.
2. Right-click **Windows Firewall** and then click **Stop**.
3. Open **Windows Firewall**, in the Inbound Rules set the port number **2444** under **Specific Local Ports**.
4. Enter the Rule name for Inbound rules to complete adding PAS Connectivity node on the windows firewall exception list.
   For example: PAS_Announcement_Server_portNo

Node Based Installations

Table 2 provides the list of Nodes on which the PAS components must be installed.

Table 2. Node Based Installation

Component	PAS Connectivity Server(1)	Aspect Server (AS)	All other 800xA Node	PAS Announcement Node
PAS Announcement Server	Not Required	Not Required	Not Required	Required
PAS Connectivity	Required	Required	Required	Not Required
Acapela Software	Not Required	Not Required	Not Required	Required

(1) Should be installed on 800xA Connectivity Server or 800xA Application Server.

PAS Connectivity and PAS Announcement Server can be combined as a single node.

For Operating System requirement on PAS Connectivity, refer to *System 800xA Third Party Software (3BUA000500*)*. PAS Announcement Server must be installed on Windows 8.1 or Windows 2012.

Install Acapela Software

The Acapela Software is a fully automatic installation procedure on Windows (custom *AcaWizard* installer). Run this software for installing the Text To Speech (TTS).

Perform the following steps to manually install the Acapela Software:

1. Double-click *SetupLaunch.exe* and then click **Next**.

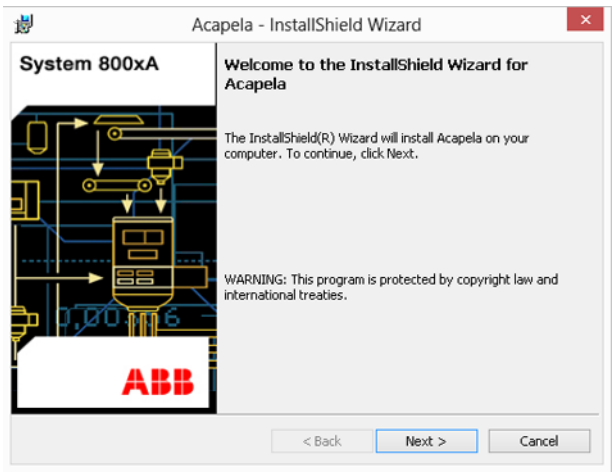

Figure 35. InstallShield Wizard

2. Read and accept the License Agreement, and then click **Next**.

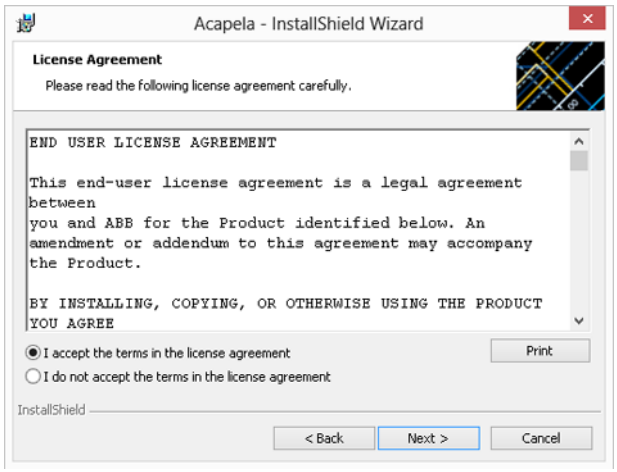

Figure 36. License Agreement

3. Retain or modify the destination folder and then click **Next**.

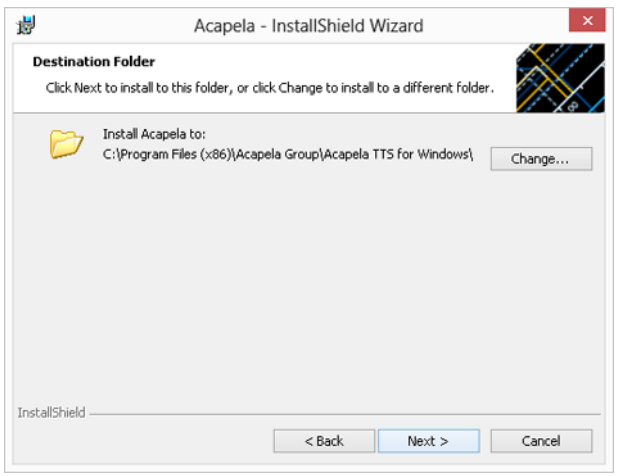

Figure 37. Destination Folder

4. Select **Complete** and then click **Next**.

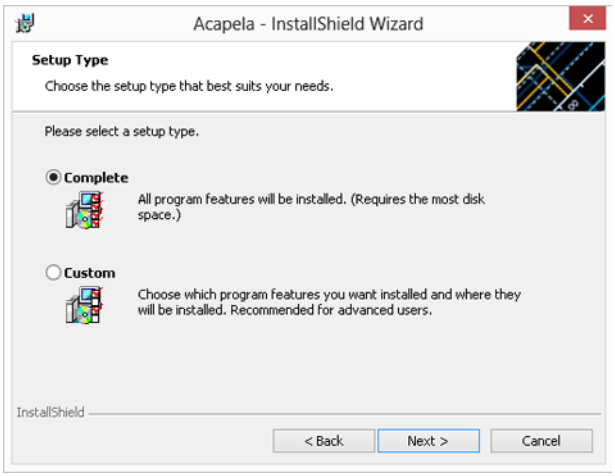

Figure 38. Installation Setup Type

5. Click **Install** to start the installation process.

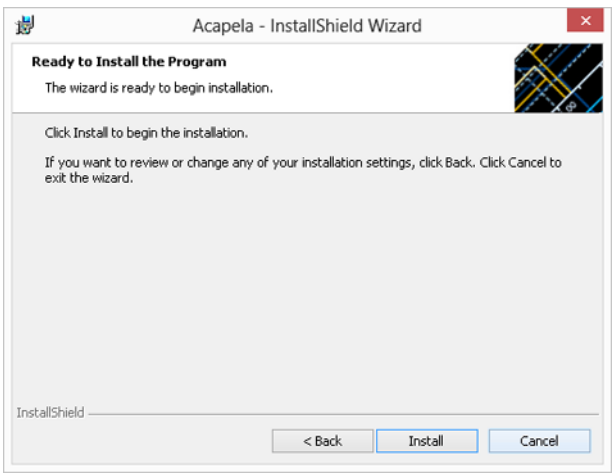

Figure 39. Installation Confirmation

6. Notice the Installation progress.

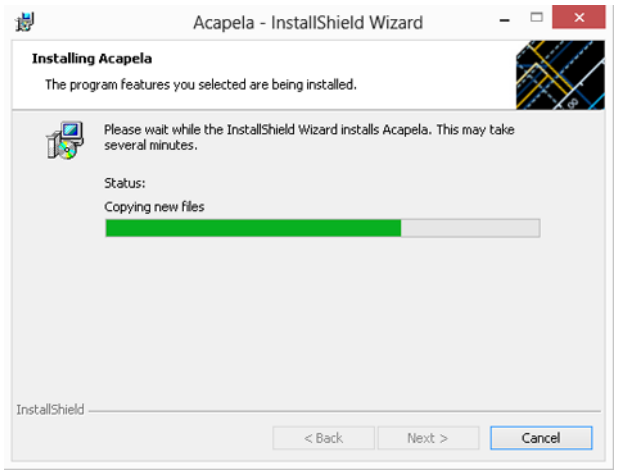

Figure 40. Installation Progress

7. Click **Finish** to complete installation.

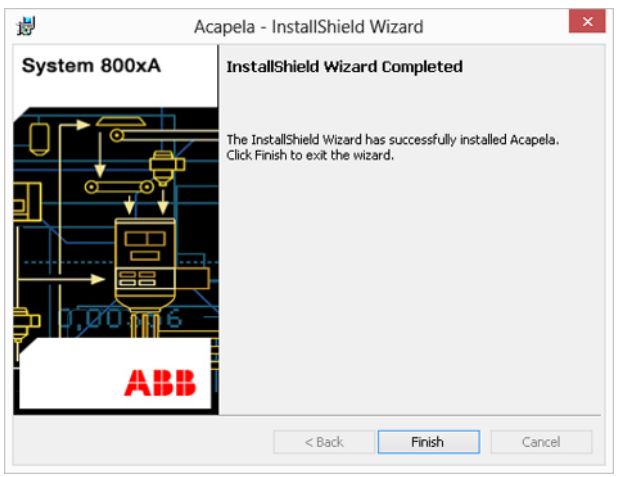

Figure 41. Installation Complete

Verify Installation

It is recommended to verify if the Acapela has been successfully installed after software installation. To accomplish this:

1. Select, **Control Panel > Programs > Programs and Features** to see if *Acapela* is installed.

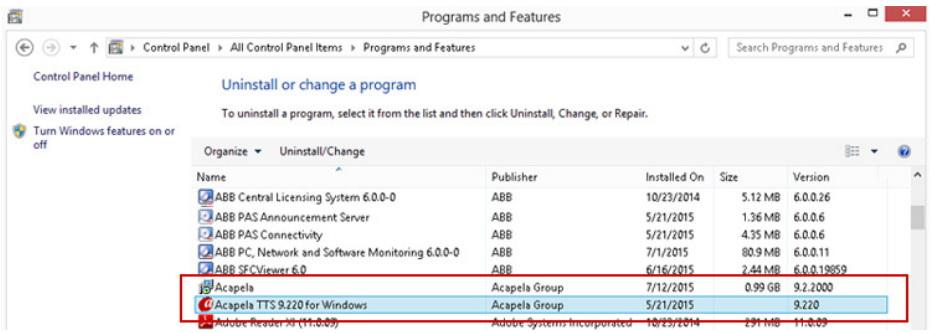

Figure 42. Acapela - Programs and Features

Install ABB PAS Announcement Server

Perform the following steps to install the ABB PAS Announcement Server manually:

1. Insert the ABB Public Address System Installation media into CD drive.
2. Browse for *ABB PAS folder (<DVD Media>\System_1_of_3\Applications\Public Address System)* and then double-click *SetupLaunch.exe*. The Installation Wizard appears, read the instructions and then click **Next**.

Figure 43. Installation Wizard

3. Read and accept the license agreement, and then click **Next**.

Figure 44. License Agreement

4. Enter **User Name** and **Organization**, and then click **Next**.

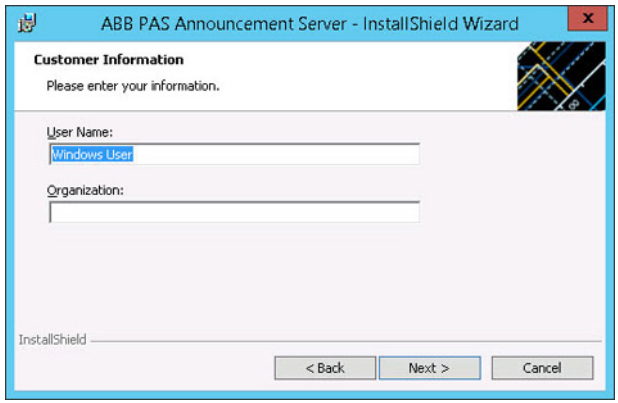

Figure 45. Customer Information

5. Retain or modify the PAS Announcement Server folder path, and then click **Next**.

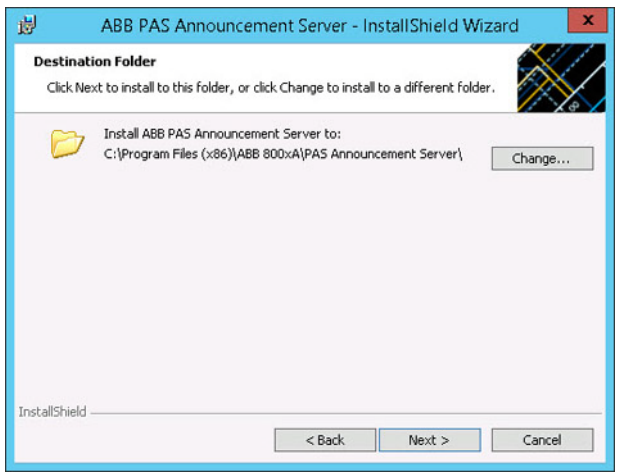

Figure 46. Destination Folder

6. Select **Complete** and then click **Next**.

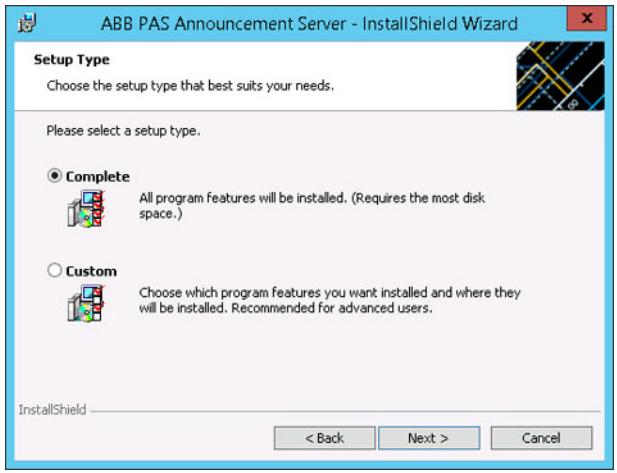

Figure 47. Installation Setup Type

7. Click **Install** to start the Installation process.

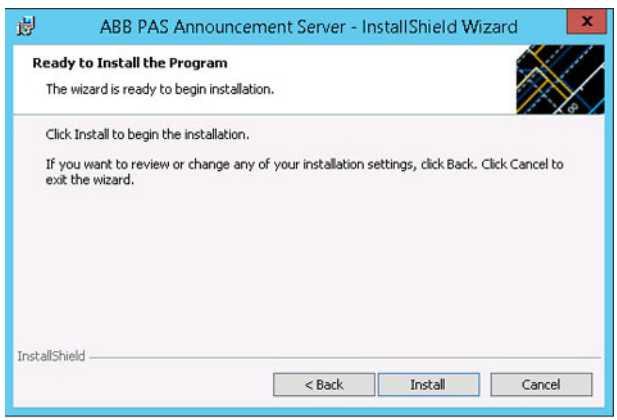

Figure 48. Installation Confirmation

8. Notice the progress of the installation.

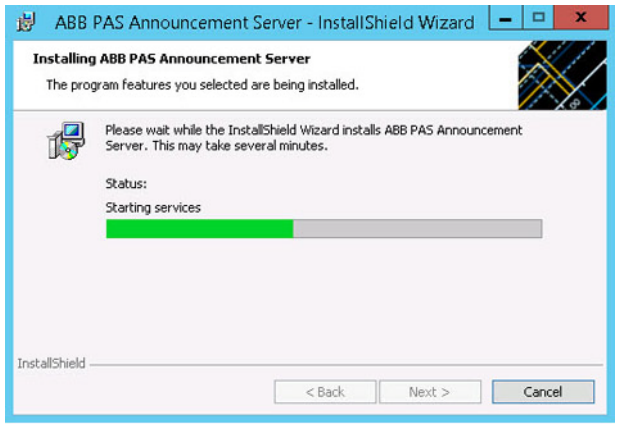

Figure 49. Installation Progress

9. Click **Finish** to complete the ABB PAS Announcement Server installation process.

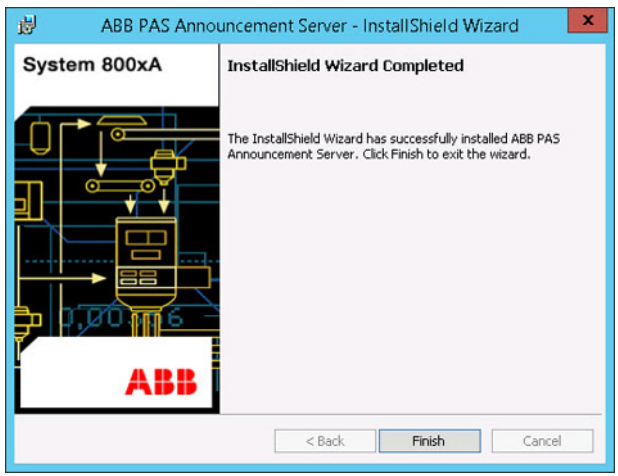

Figure 50. Installation Complete

In 800xA System, Announcement server should not be combined with Audible Alarm node.

Verifying Installation

It is recommended to verify if the ABB PAS Announcement Server has been successfully installed after software installation. To accomplish this:

1. Open **Programs and Features** from **Control Panel** and verify if *ABB PAS Announcement Server* is installed.

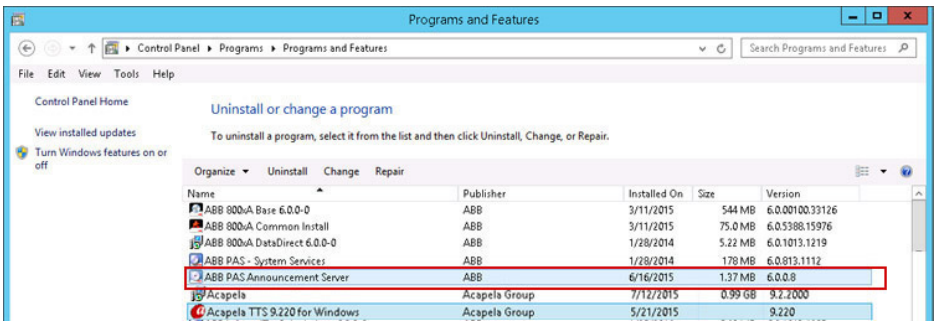

Figure 51. ABB PAS Announcement Server - Programs and Features

Verify PAS Announcement Service

It is recommended to verify that the *ABB PASService* is running after installing PAS Announcement Server, to accomplish this:

1. Click **Start**, in the start **Search** box, type **services.msc**, and then press **Enter**.

   or

   Click **Start**. and then type run, in the list of results, click **Run** and then type **Services.msc**.

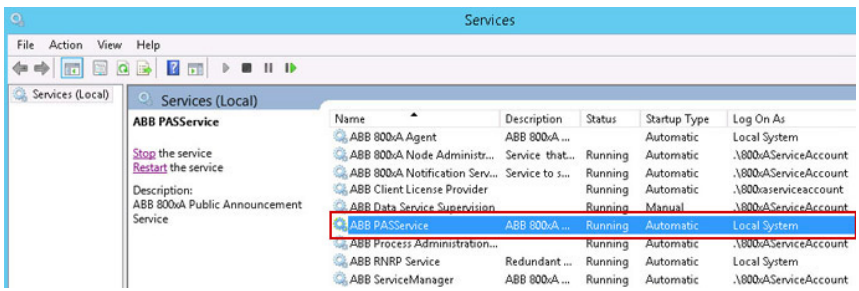

Figure 52. ABB PASService

2. Incase the service is stopped, right-click **ABB PASService** and then click **Start**.

Install ABB PAS Connectivity

1. Insert the ABB Public Address System Installation Media into the CD drive. Browse to the *ABB PAS Connectivity folder (<DVD Media>\System_1_of_3\Applications\Public Address System)* and double-click *SetupLaunch.exe*. The Installation Wizard appears, read the instructions and then click **Next**.

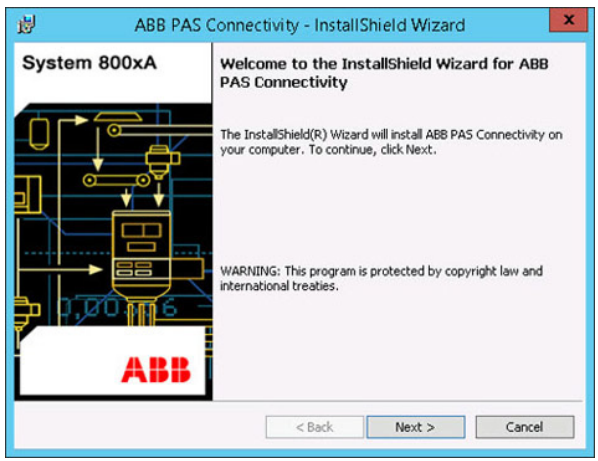

Figure 53. Installation Wizard

2. Read and accept the License Agreement, and then click **Next**.

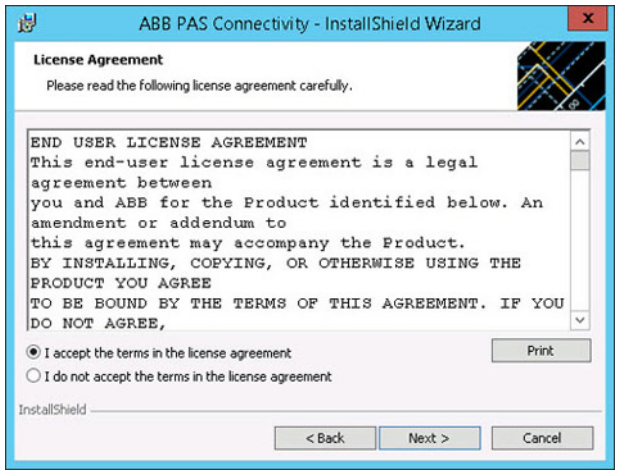

Figure 54. License Agreement

3. Enter **User Name** and **Organization**, and then click **Next**.

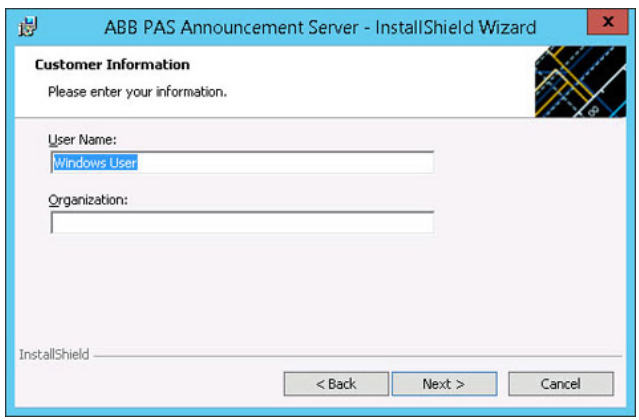

Figure 55. Customer Information

4. Retain or modify the PAS Server folder path, and then click **Next**.

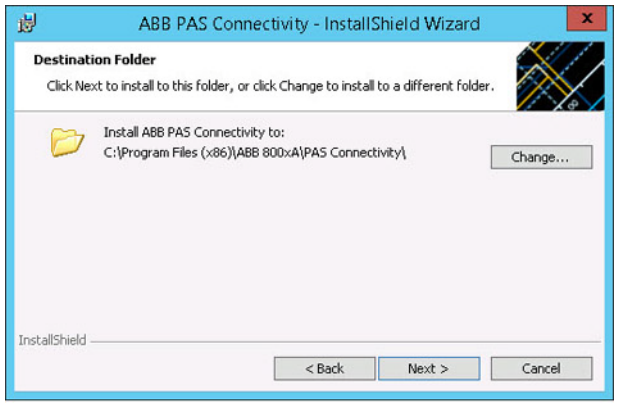

Figure 56. Destination Folder

5. Select **Complete** and then click **Next**.

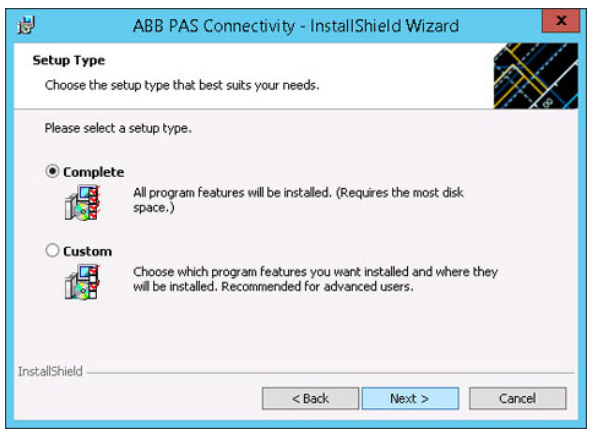

Figure 57. Installation Setup Type

6. Click **Install** to start the Installation process.

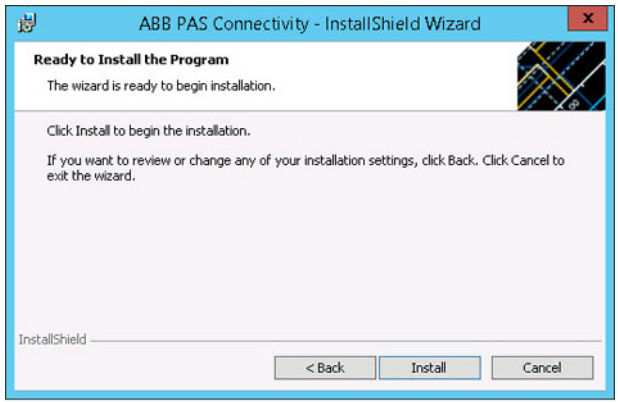

Figure 58. Installation Confirmation

7. Notice the progress of the installation.

Figure 59. Installation Progress

8. Click **Finish** to complete the ABB PAS Connectivity installation process.

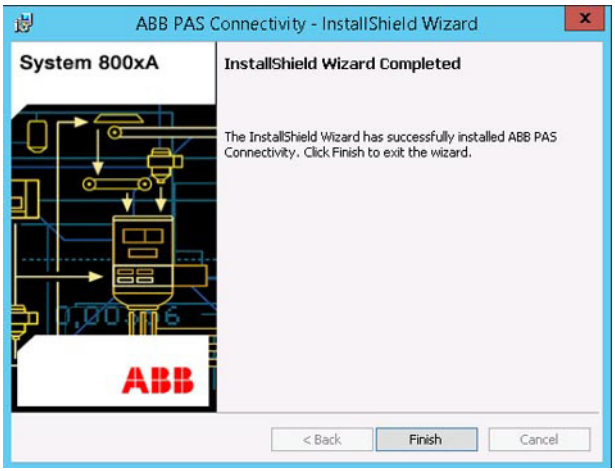

Figure 60. Installation Complete

Verify Installation

It is recommended to verify that ABB PAS Connectivity has been successfully installed after software installation. To accomplish this:

1. Open **Programs and Features** from **Control Panel** and then verify if ABB PAS Connectivity is listed.

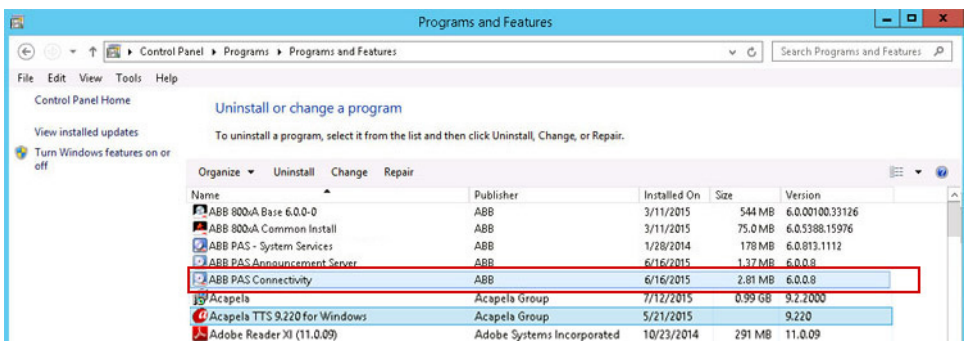

Figure 61. ABB PAS Connectivity - Programs and Features

Post Installation

Load System Extension

Perform the following steps to load the System extensions on Aspect Server:

1. Open **Configuration Wizard** from the **Windows Taskbar**.

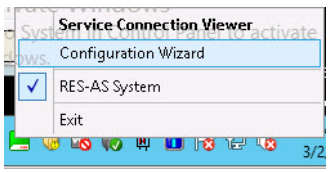

Figure 62. Configuration Wizard

2. Select **System Administration** and then click **Next**.

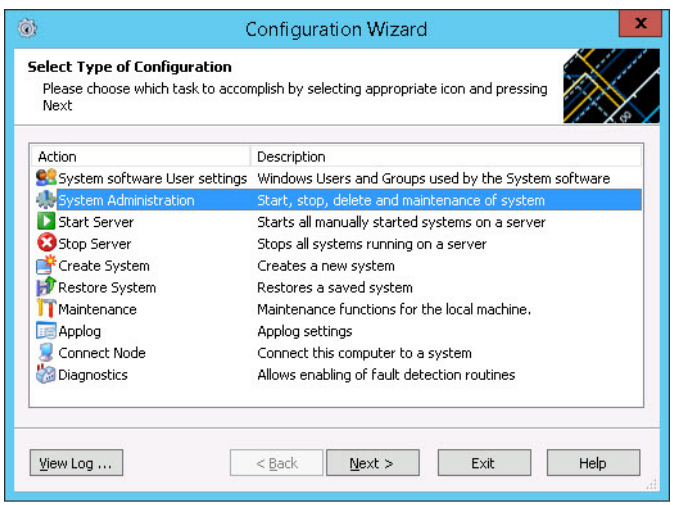

Figure 63. Configuration Wizard - System Administration

3. Select the **System Name** and then click **Next**.

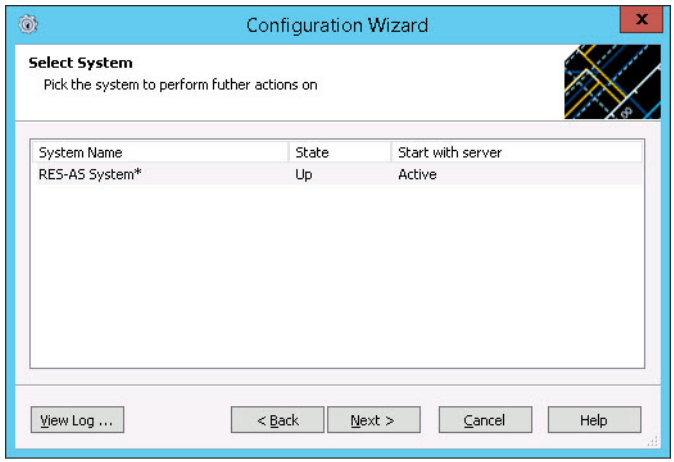

Figure 64. Configuration Wizard - Select System

4. Select **System Extension Load** and then click **Next**.

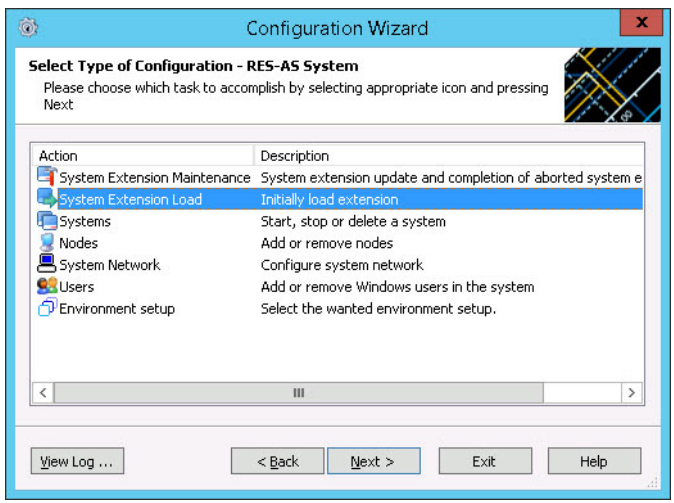

Figure 65. Configuration Wizard - Configuration Type

5. Select *ABB 800xA Public Address System* and then press .

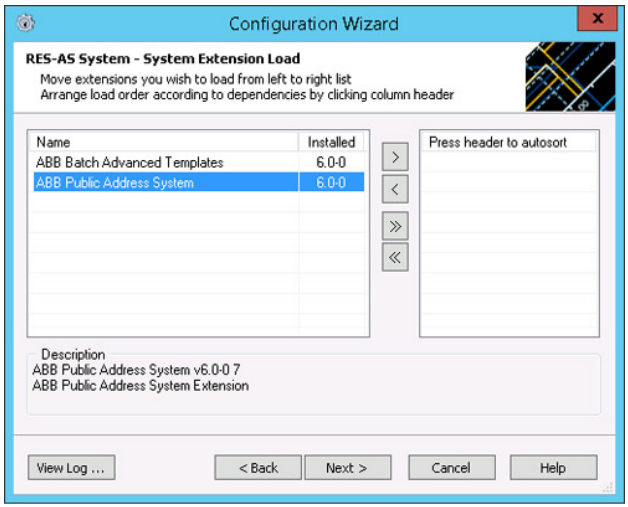

Figure 66. Configuration Wizard - System Extension Loaded

A green Tick mark indicates that the System Extension *ABB 800xA Public Address System* is ready loading. Click **Next** to load the extension.

6. Notice the progress of the **System Extension Loading** process.

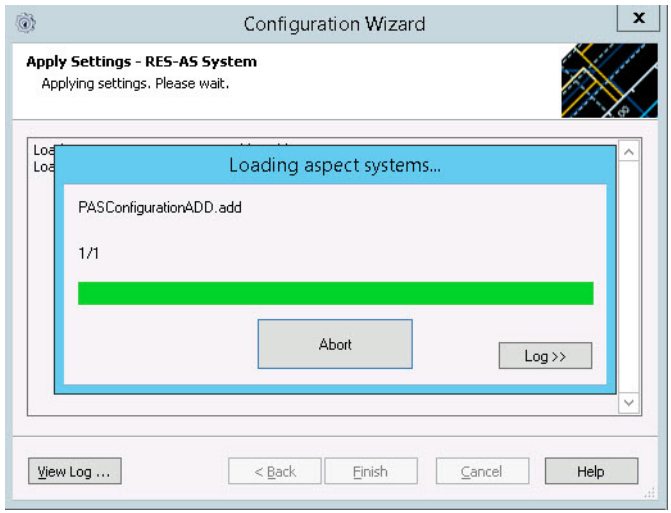

Figure 67. loading Aspect Systems

7. Click **Finished** to complete the loading of *ABB 800xA Public Address System* extension in 800xA System.

   This completes the loading of *ABB 800xA Public Address System* into the 800xA System.

Verify PAS System Extensions

Verifying *ABB 800xA Public Address System extension* can be done using two options:

1. Navigate to **Admin Structure > Administrative Objects > System Domain Name > System Extension**.

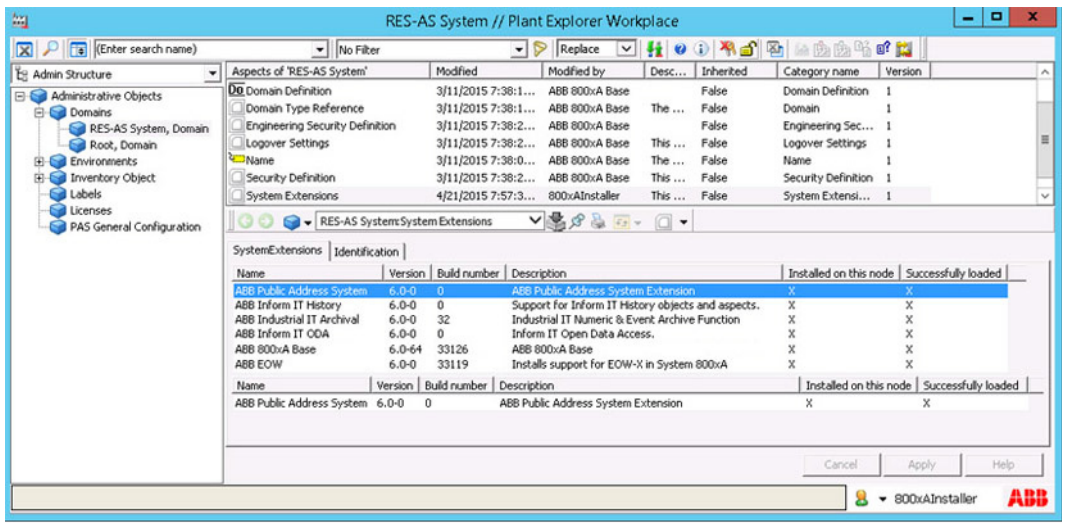

Figure 68. ABB 800xA Public Address - System extension aspect

2. Click on the *Plant Explorer* to open the list of *Installed Products and Extensions* screen and verify if *ABB 800xA Public Address System* is loaded.

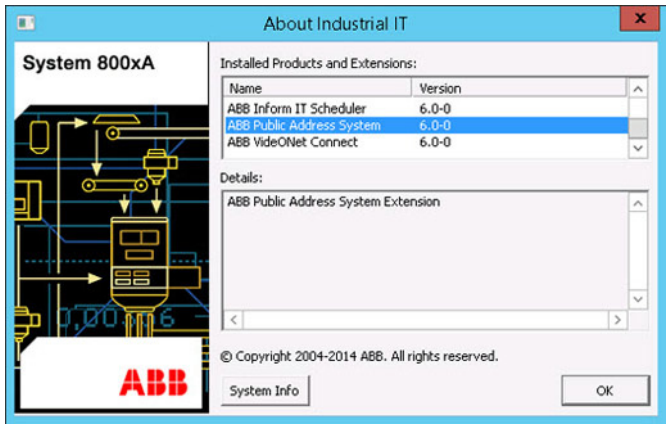

Figure 69. ABB 800xA Public Address System - Installed Products and Extensions

Index

A

ABB 800xA Public Address System 13

C

Configure Message Description 66
Configured Alarm and Event 65

D

Deployment diagram 13

L

Language Voice Settings 60

N

Node Based Installations 22
Node Name 68

O

Order of Installation 21

P

PAS Announcement aspect 69
PAS Configuration aspect 62
PAS Global Setting 57
PAS Service 45
Port No 68

S

System and Hardware Settings 59

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