

SOA Software Service Manager Agent for WCF: Configuration Guide

SOA | software™



Agent for WCF

Configuration Guide

SOAWCF_Agent_Config_v62

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SOA Software, Inc.

SOA Software, Inc.

12100 Wilshire Blvd, Suite 1800

Los Angeles, CA 90025

(866) SOA-9876

www.soa.com

info@soa.com

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Contents

Chapter 1 | Configuration..... 4

 Step 1: Launch Agent for WCF Configuration Wizard 4

 Step 2: Configure Agent Container 4

 Add Agent Container and Configure Options 4

 Configure Monitoring Data Delivery Mechanism 5

 Assign X.509 Certificate Identity to Agent Container 8

 Register SOA Container in Policy Manager 9

 Complete SOA Container Configuration in Agent for WCF Configuration Wizard 11

 Configure Agent for WCF Properties..... 11

 Configure Service Discovery..... 13

Appendix A | Agent for WCF Installation Directory Structure..... 14

Appendix B | Customer Support..... 15

Chapter 1 | Configuration

The following instructions tell you how to configure the Service Manager Agent for WCF. You will be using the Agent for WCF Configuration Wizard and the Policy Manager Management Console to accomplish configuration and container registration tasks.

Step 1: Launch Agent for WCF Configuration Wizard

- 1 From the Windows Start menu select **SOA Software > Agent for WCF > Configure Agent for WCF**.

The wizard is successfully launched when the Welcome screen displays.

Step 2: Configure Agent Container

Add Agent Container and Configure Options

- 1 Select **Add Container** and configure the following options:
 - **WebSite Name:** Used if you have enabled Service Discovery. Select the name of the website in the Internet Information Services (IIS) Manager > Sites > Default Web Site section that is hosting the WCF service and you would like to be discovered by the Agent for WCF.
 - **Container Key:** The key that was registered in Policy Manager Workbench. Also provide a URL to the Workbench Metadata Exchange Service. This URL uniquely identifies the Workbench instance.
 - **Metadata Exchange Service URL:** Specify Workbench metadata Exchange Service URL. This URL uniquely identifies the Workbench instance.

Add Container

Configuration

WebSite Name	(All)
Services Discovery Enabled	False

Container

Container Key	6e4bea93-cb78-4d2e-b60a-3096a5b2
Metadata Exchange Service URL	http://localhost:9900/wsmex

Identities

Client Certificate for Policy Manager	
---------------------------------------	--

Monitoring Data Delivery

Delivery Transport	Database
Database Server Type	MS SQL
Database Server	
Database Name	
Database Login Account	
Password	

Monitoring Data Delivery (Advanced)

Proxy Server

WebSite Name
The name of web site this Container is mapped to.

Check OK Cancel

Configure Monitoring Data Delivery Mechanism

- 1 There are currently two monitoring data delivery methods: Database and Web Service.
 - Both methods support:
 - Sending monitoring and recording data to Workbench, where the data can be examined
 - Synchronous and asynchronous operations
 - Database transport uses a direct connection to the Workbench database (currently supported database engines are Microsoft SQL Server and Oracle Database);
 - Web Service transport uses Workbench Web Service API.
- 2 Configure the database transport.
 - **Configure Database Transport:** Select **Delivery Transport > Database**. Using the drop-down select the server type (MS SQL or Oracle), and specify server name, database name, database user account that has permissions to write to that database, and user password.

Note: This option does not support Windows Authentication

Add Container

Configuration

WebSite Name	(All)
Services Discovery Enabled	False

Container

Container Key	6e4bea93-cb78-4d2e-b60a-3096a5b2
Metadata Exchange Service URL	http://localhost:9900/wsmex

Identities

Client Certificate for Policy Manager	
---------------------------------------	--

Monitoring Data Delivery

Delivery Transport	Database
Database Server Type	MS SQL
Database Server	
Database Name	
Database Login Account	
Password	

Monitoring Data Delivery (Advanced)

Proxy Server

Delivery Transport
Sets how monitoring data will be delivered to the Policy Manager. "Database" uses direct connection to ...

Check OK Cancel

- 3 The following properties can be tuned to control database transport behavior:
 - **SQL Command Timeout:** Sets the timeout for all database commands (statements) issued against the Workbench database.
 - **Rollup Data Caching Time:** Sets the common metrics accumulation time interval. When this interval expires, all accumulated data is written to the database.
 - **Asynchronous:** Enables monitoring data that is delivered to the Workbench asynchronously.
 - **Max Asynchronous Queue Size:** Sets the maximum number of transactions that can be accumulated in the queue before discarding new transactions. If this parameter is set to 0, the queue is limited by available memory only.
 - **Max Asynchronous Threads:** Sets the maximum number of threads that can be used for delivery operations.
 - **Dispose Timeout:** Sets the internal worker threads dispose timeout.
- 4 Configure the web service transport.
 - **Configure Web Service Transport:** Select **Delivery Transport > Web Service**. The address of the service is discovered automatically.

Add Container	
Configuration	
WebSite Name	(All)
Services Discovery Enabled	False
Container	
Container Key	6e4bea93-cb78-4d2e-b60a-3096a5b2
Metadata Exchange Service URL	http://localhost:9900/wsmex
Identities	
Client Certificate for Policy Manager	
Monitoring Data Delivery	
Delivery Transport	WebService
Monitoring Data Delivery (Advanced)	
Max Upload Message Size	204800
Max Upload Delay Time	00:01:00
Asynchronous	True
Max Asynchronous Queue Size	5000
Max Asynchronous Threads	10
Dispose Timeout	00:01:00
Proxy Server	
Delivery Transport Sets how monitoring data will be delivered to the Policy Manager. "Database" uses direct connection to ...	
Check	OK
Cancel	

5 The following advanced transport properties allow the following configuration options:

- **Max Upload Message Size:** Sets the maximum size (KB) of a single upload message sent through the Workbench Web Service API. The data is accumulated in the service process and sent to the Workbench when a SOAP message reaches this size.
- **Max Upload Delay Time:** Sets the maximum size (KB) of a single upload message sent through the Workbench Web Service API. The data is accumulated in the service process and sent to the Workbench when a SOAP message reaches this size.
- **Max Upload Delay Time:** Sets the maximum time to complete formation of a single upload message. The data is accumulated in the service process and sent to the Workbench when the oldest transaction is older than this value.

Note: Both "Max Upload Message Size" and "Max Upload Delay Time" parameters work simultaneously.

- **Asynchronous:** Enables monitoring data to be delivered to the Workbench asynchronously.
- **Max Asynchronous Queue Size:** Sets the maximum number of transactions that can be accumulated in the queue before starting discarding new transactions. If this parameter is set to 0, the queue is limited by available memory only.
- **Max Asynchronous Threads:** Sets the maximum number of threads that can be used for delivery operations.
- **Dispose Timeout:** Sets the internal worker threads dispose timeout.

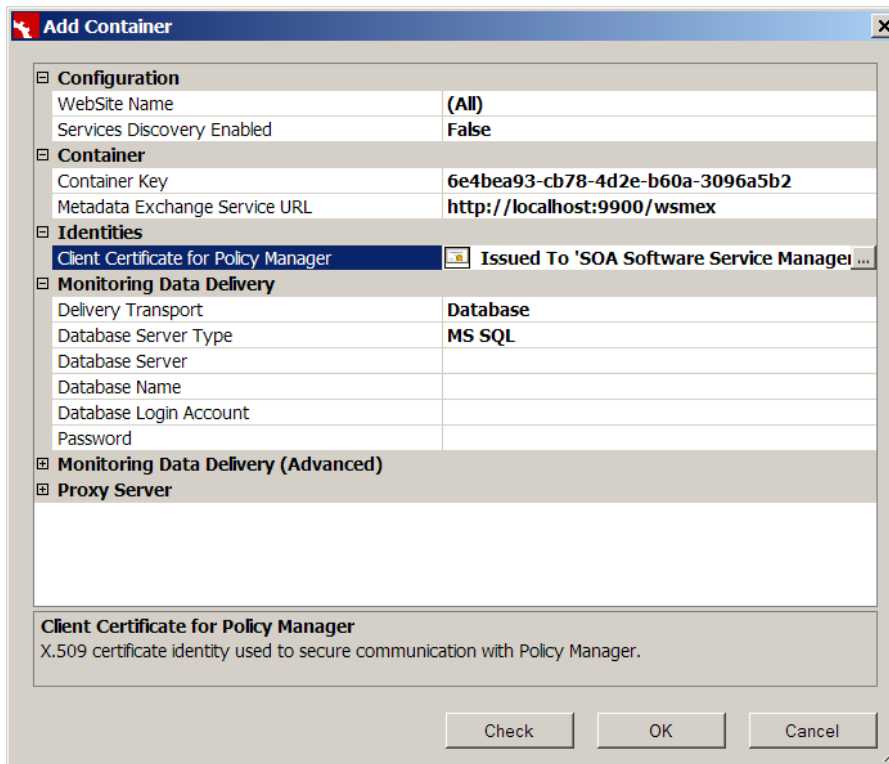
Assign X.509 Certificate Identity to Agent Container

- 1 The Agent for WCF requires that an X.509 certificate identity be assigned to the Agent container to secure communication between the Agent and Policy Manager.
 - **Client Certificate for Policy Manager:** Select
 - Select certificate option (auto-generate or use existing).
 - Set user permissions.
 - Select certificate from the list in the Local Machine's personal store.

Add Container

Configuration	
WebSite Name	(All)
Services Discovery Enabled	False
Container	
Container Key	6e4bea93-cb78-4d2e-b60a-3096a5b2
Metadata Exchange Service URL	http://localhost:9900/wsmex
Identities	
Client Certificate for Policy Manager	...
Monitoring Data Delivery	
Delivery Transport	Database
Database Server Type	MS SQL
Database Server	
Database Name	
Database Login Account	
Password	
Monitoring Data Delivery (Advanced)	
Proxy Server	
Client Certificate for Policy Manager X.509 certificate identity used to secure communication with Policy Manager.	
Check	OK
Cancel	

After the configuration is complete, the certificate status changes to "Issued."



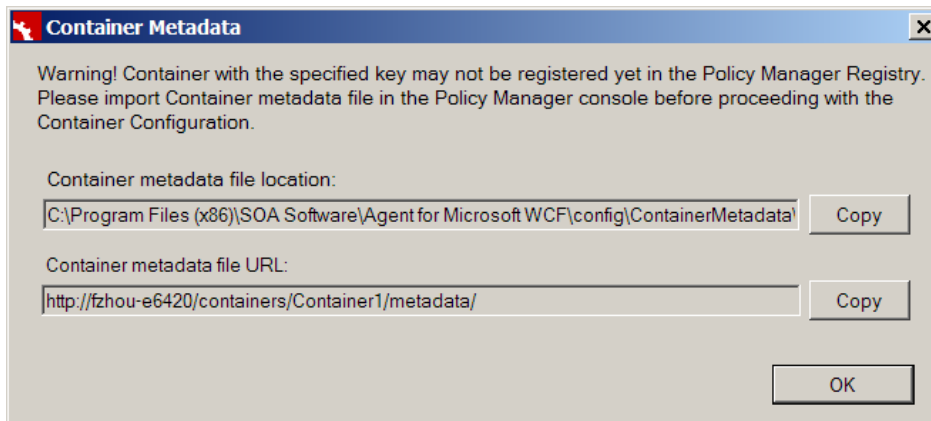
Add Container

Configuration	
WebSite Name	(All)
Services Discovery Enabled	False
Container	
Container Key	6e4bea93-cb78-4d2e-b60a-3096a5b2
Metadata Exchange Service URL	http://localhost:9900/wsmex
Identities	
Client Certificate for Policy Manager	Issued To 'SOA Software Service Manager ...'
Monitoring Data Delivery	
Delivery Transport	Database
Database Server Type	MS SQL
Database Server	
Database Name	
Database Login Account	
Password	
Monitoring Data Delivery (Advanced)	
Proxy Server	

Client Certificate for Policy Manager
X.509 certificate identity used to secure communication with Policy Manager.

Check OK Cancel

Note: When the Agent for WCF Configuration Wizard is run for the first time the Agent container is not yet registered in Policy Manager. The configuration wizard identifies the registration status through communication with Policy Manager and presents the following warning:



Container Metadata

Warning! Container with the specified key may not be registered yet in the Policy Manager Registry. Please import Container metadata file in the Policy Manager console before proceeding with the Container Configuration.

Container metadata file location:

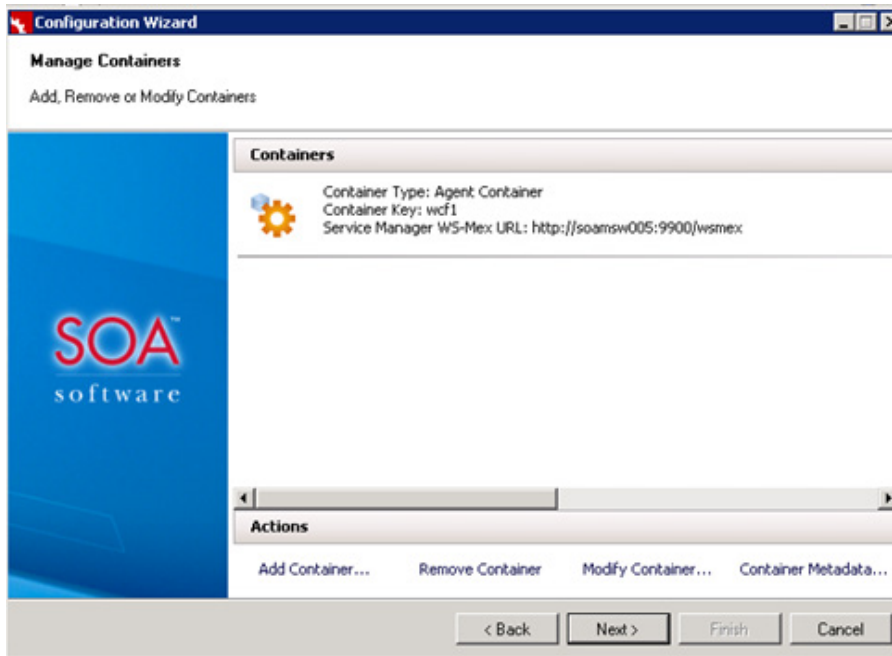
Container metadata file URL:

OK

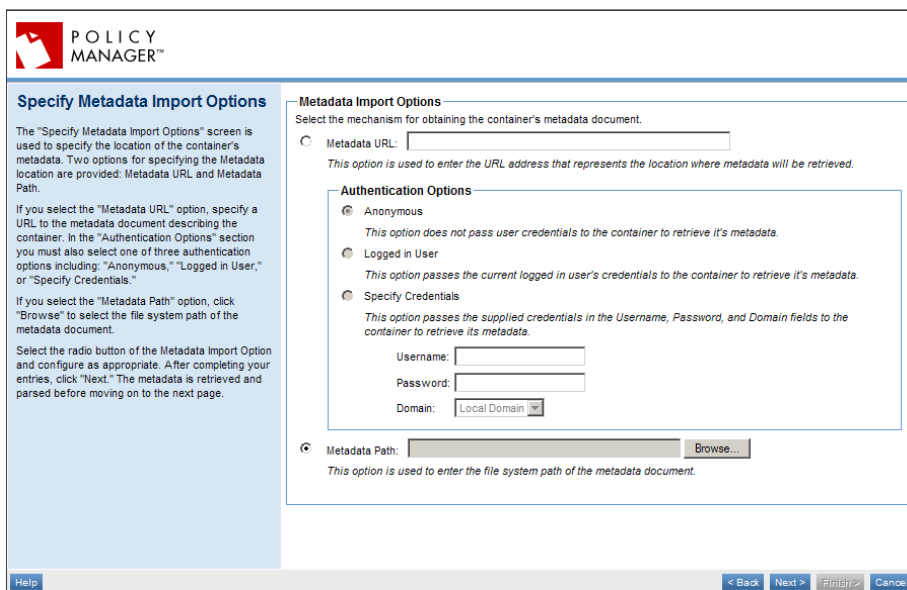
The warning shows a local path to a container metadata file that must be imported in the Policy Manager "Management Console" to complete the container registration.

Register SOA Container in Policy Manager

- 1 On the main screen of the Agent for WCF Configuration Wizard select **Container Metadata**, copy the metadata path that represents the location of the Policy Manager instance (local or remote) where you will be registering the SOA Container.



- 2 Log into the Policy Manager Management Console and select the Containers folder.
- 3 Run **Add Container** and select the SOA Container option.
- 4 On the Specify Metadata Import Option screen, select a metadata import option (URL or Path).
- 5 Paste the full path to the metadata file copied in the clipboard into the URL or Path text box, configure additional options as needed, and click **Next**.

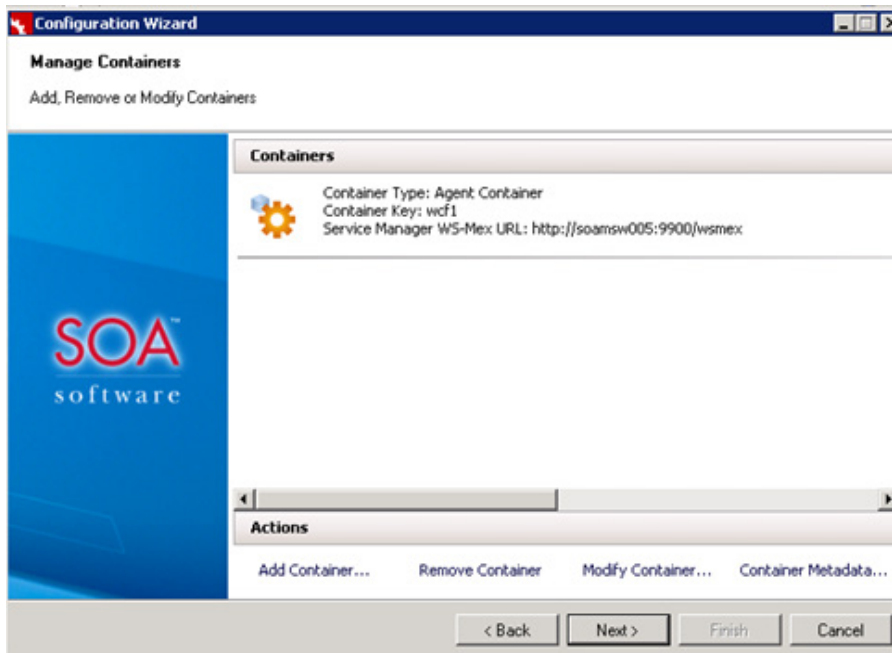


- 6 If the container certificate is not trusted by Policy Manager the X.509 Certificate is Not Trusted screen displays. Select **Yes** to add the certificate, and complete the remaining wizard tasks.

Complete SOA Container Configuration in Agent for WCF Configuration Wizard

- 1 Return to the Agent for WCF Configuration Wizard and click **OK**.

No warning is presented because the container is now registered in Policy Manager and the configuration wizard returns to the Manage Containers screen.

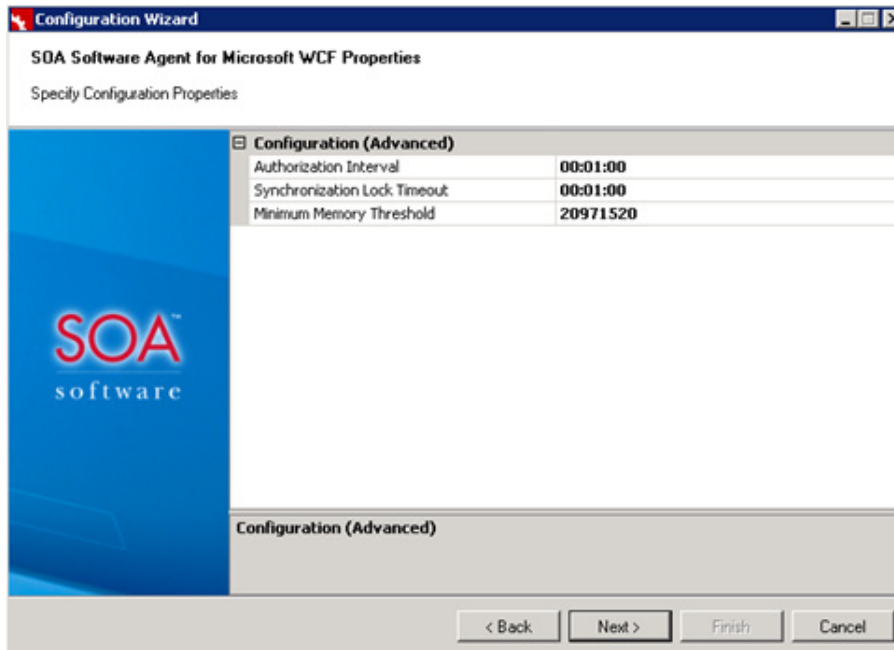


- 2 You have successfully created an Agent Container. Click **Next** to continue.

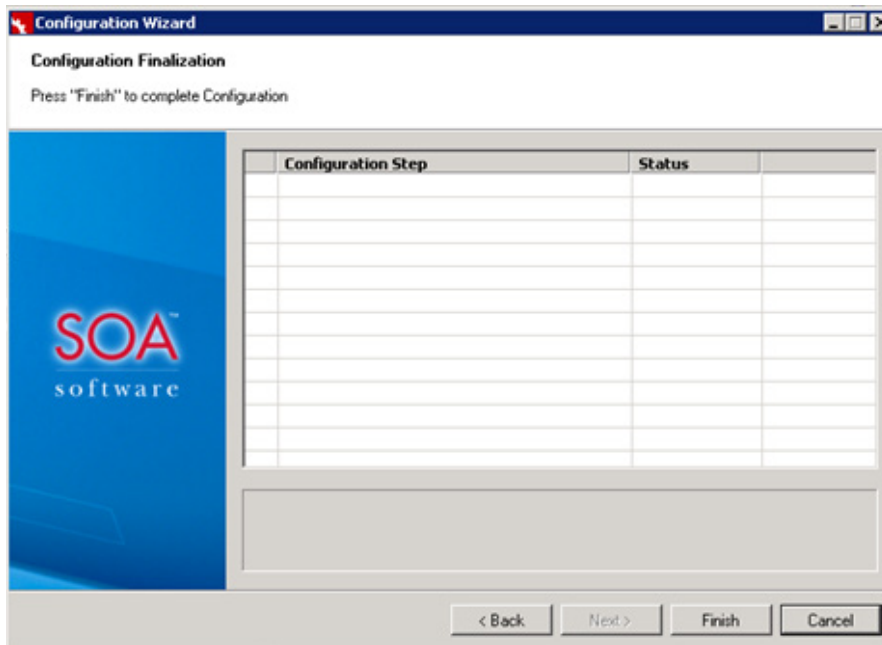
Configure Agent for WCF Properties

- 1 To configure the Agent for WCF installation with service discovery runtime, select True for the Services Discovery Enabled option.

Note that Service Discovery must also be enabled in the Containers section of the Policy Manager Management Console for this function to be operational.



- The following advanced configuration options are available:
 - Authorization Interval:** Sets a time interval for retaining authorization results in the memory cache.
 - Synchronization Lock Timeout:** Sets a time interval to wait for a lock on the common configuration file before throwing error.
 - Minimum Memory Threshold:** Sets a minimum amount of available physical memory (bytes) that allows queuing of asynchronous operations.
- When the Agent for WCF configuration is complete, click **Next** to continue, then **Finish** on the Configuration Finalization screen. Verify that all steps completed without errors.



Exit the wizard. The Agent for WCF is now fully configured and operational.

Configure Service Discovery

- 1 If the Services Discovery Enabled option was set to **True** during the initial Agent for WCF configuration process, the next step is to enable service discovery in the Policy Manager Management Console.
 - Go to the Container Details of your Agent for WCF container.
 - Select **Modify Service Discovery Options** and enable the **Discover services only** option.

Note: The Agent for WCF does not support the Discover and automatically manage services option.

SOA Software Policy Manager - Modify Service Discovery Options - Windows Internet Explorer

http://soamsw005:9900/faces/container/modify_service_discovery_config.faces?containerKey=wcf1

Modify Service Discovery Options

Container Details

Type: urn:soa.com:wcf.agent

Instance Name: wcf1

Container Key: wcf1

Service Discovery Options

☒ **Discover Agent is deployed**
(Select this checkbox if the Embedded Management Point container supports Discovery Agent functionality)

Agent URL:
Specify the Agent URL used to contact the Embedded Management Point "Discovery Agent". The source of the URL is based on your initial Embedded Management Point configuration and supported application server.
E.g.:- http://[hostname]:8080/soa/soamp/services/ManagementAgent

☐ **Discover and automatically manage services**
Enables the "Discovery Agent". When you select this option, when a new service is added to the Application Server, the Discovery Agent registers the service in the Policy Manager, applies the appropriate policies, and immediately begins to monitor service activity.

☒ **Discover services only**
Enables the "Discovery Agent". When you select this option, the "Discovery Agent" registers the service in Policy Manager data repository and posts the service to the "Discovered Services Portlet." With this option, policy enforcement and monitoring only begins after you select the "Manage Service" action in the console.

☐ **Do not discover services**
Disables the Service Discovery Functionality.

Help Cancel Apply

100%

Appendix A | Agent for WCF Installation Directory Structure

The Agent for WCF installation directory is organized as follows:

Folder	Description
Bin	Includes configuration wizard executables and internal files.
Config	Used to store Agent for WCF configuration data.
Developer Tools	Includes tools that allow you to download a physical service WSDL and input it into Policy Manager.
Docs	Includes Agent for WCF documentation.
Lib	Includes new and deprecated Policy Manager provisioning packages.
License	Includes license agreement information.
Samples	Includes new and deprecated Ready To Use samples. Note if you would like to use Ready To Use samples from a previous Agent for WCF version you must install the deprecated policy provisioning package located in the \lib folder.
Logging	Includes sample logging files.

Appendix B | Customer Support

SOA Software offers a variety of support services by email and phone. Support options and details are listed below.

Support Option	Details
Email	<ul style="list-style-type: none">• support@soa.com• The Support section of the SOA Software website at https://support.soa.com/support provides an option for emailing product-related inquiries to our Support team.
Phone	1-866-SOA-9876 (1-866-762-9876)
Support Site	The Support section of the SOA Software website at https://support.soa.com/support includes many product-related articles and tips that might help answer your questions.
Documentation Updates	We update our product documentation for each version. If you're not sure you have the latest documentation, send an email request to support@soa.com . Specify the product and version you're using.

For more information, visit <https://support.soa.com/support/>.