



*Symphony Agent for
ServiceNow Installation
Guide*

Version 1.3

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Chapter 1

Introduction

This document describes integrating Symphony with ServiceNow using the Symphony Ticket Adapter Library (TAL).

The document is intended for AVI-SPL and its customers.

Chapter 2

Support

The AVI-SPL Project Managers and Service Readiness team should use the [Service Desk portal](#) for requesting Symphony Operations assistance.

Customers who require assistance with upgrading, reporting issues, and general support inquiries should send an email to NOW-T2C@avispl.com and the appropriate team will respond.

Chapter 3

Before You Install

System Requirements

The following components are required to utilize the Symphony Agent for ServiceNow:

- ServiceNow version Orlando or later
- A ServiceNow user account in Symphony with the following roles:
 - REST API Access: snc_internal (out of box)
 - Task access: itil (for Incident) or sn_customerservice_agent (for Case)
- URLs, Symphony Customer IDs, and credentials for each Symphony instance to connect (provided by Service Readiness)
- A Company (or Account, if leveraging Cases) record corresponding to each Symphony instance

Scoping Considerations

Before beginning the configuration, the following questions regarding the scope of the integration should be addressed.

- Do you require a MID Server for security reasons, such as a firewall or proxy?

A MID Server is a Java program that runs on a server, separate from both the Symphony and ServiceNow systems, that acts as an intermediary for the ServiceNow platform.

If yes, see [MID Server installation](#) ServiceNow Documentation.

- On which Task table should Symphony alerts be created on?

The adapter supports standard Incidents in the core ITSM module as well as Cases in the CSM module.

- When generating links for Symphony into the corresponding ServiceNow task, which view should those links direct to?

The adapter supports the standard Platform view, but can also be set to open in the CSM Agent Workspace

- What state values on your target Task table correspond to the following states in Symphony:

- **Open**
- **ClosedPending**

This often corresponds to a **Resolved** or similar state in ServiceNow.

- **Closed**

These can be set or modified in the Application or Symphony Instance configuration and require no code to change.

Customization Considerations

Customizations and modifications to the ServiceNow instance or Symphony Agent scripted extensions might be necessary. These changes are completed by the ServiceNow Administrator or Developer. The Symphony Agent provides Scripted Extensions for this purpose to avoid having to modify core Symphony Agent code and ensure future update compatibility.

Questions to consider include:

- Have you customized the **Impact, Urgency, Priority** fields?
The Symphony Agent translates Symphony priorities into defaults for these fields. The Agent utilizes the **Priority Data Lookups** table in ServiceNow to map default Priority, Impact, and Urgency.
- Do you have additional or replaced fields that need to be mapped to the Symphony ticket?
The **SymphonyTaskSync** scripted extension point allows additional or overridden field assignment, both inbound to ServiceNow and outbound to Symphony.

If the answers to these questions are “yes”, customization is required instead of a configuration setting.

Prerequisites

- Ensure that the ServiceNow Madrid or newer instance exists.
- Ensure that ServiceNow is configured with at least one MID server.
- Service Delivery has provided the customer with Symphony credentials.

AVI-SPL provides the account configuration files and properties required to complete the installation process for populating ServiceNow.

Chapter 4

Installing Symphony Agent for ServiceNow

The complete installation process includes:

1. Import and commit the Update Set.
2. Configure the ServiceNow Properties.
3. Configure the Symphony Instance.
4. Associate an Instance with a Company Record.
5. Configure Symphony Properties.

The `symphony_agent.xml` file contains the update set for the full Symphony Agent for ServiceNow.

The installation does not include any form or list modifications. Symphony-based form changes are the responsibility of the client ServiceNow administration. The following modifications are recommended:

- Add the **Symphony ID** and **Symphony link** fields and the Symphony Events related list to the standard form view of the task table receiving Symphony alerts.
- Add the **Symphony ID** and **Symphony Instance** fields to the admin Form and List view for the Company or Account.

Update Set Contents

The following records are included in the update set.

Record Type	Record Contents
2 Custom Tables (With associated forms)	<ul style="list-style-type: none">• Symphony Instances• Symphony Events
6 Custom Fields	<ul style="list-style-type: none">• Task.Symphony ID• Task.Symphony link• Company.Symphony ID• Company.Symphony Instance• Attachment.Correlation ID• Journal Entry.External ID
1 Business Rule	Send Task Update to Symphony
2 Script Includes	<ul style="list-style-type: none">• SymphonyBase• SymphonyTaskSync

Record Type	Record Contents
1 Extension Point	SymphonyTaskSync
1 UI Policy	Hide Symphony fields if empty [Task]
7 System Properties	<ul style="list-style-type: none"> • symphony.task.table • symphony.task.portal • symphony.task.closedStatuses • symphony.task.openStatuses • symphony.task.resolvedStatuses • symphony.task.incomingClose • symphony.task.debug
1 Application Menu	Symphony
4 Scripted REST Resources	<ul style="list-style-type: none"> • get_version • sync_task • add_attachment • remove_attachment
1 Outbound REST Message	SymphonyTaskUpdate

Importing an Update Set

1. Sign in to ServiceNow as a System Administrator.
2. In the upper-right corner of the page, select the account name.
3. On the **User Menu** drop-down list, select **Elevate Roles**.
4. Select the **security_admin** check box.
5. Select **OK**.
6. In the Filter Navigator, enter System Update Sets.
7. In the System Update Dates section, select Retrieved Update Sets.
8. In the **Name** column, select the **Import Update Set from XML** link.
9. Select **Choose File** and select the **symphony_agent.xml** file.
10. Select **Upload**.

Committing an Update Set

1. Sign in to ServiceNow as a System Administrator.
2. In the **Filter Navigator**, enter **System Update Sets**.
3. In the **System Update Dates** section, select **Retrieved Update Sets**.
4. In the **Name** column, select the **Symphony Agent** link.
5. Select **Preview Update Set**.

6. Resolve all problems, if applicable.

NOTE An **Update Set** cannot be committed until the problems related to that Update Set are resolved.

7. Select **Commit Update Set**.

Upgrading an Existing Symphony Agent

This section only applies if the Symphony Agent installed is being upgraded to version 1.1.2 or later. This procedure, if applicable, should be completed after installing the Symphony Agent.

1. During the preview, possible issues include:
 - Properties
It is recommended that the values be recorded and then, when prompted, accept the remote update.
 - Dictionary Entries
Skip remote update for **u_symphonyid**.
2. After the Update set is committed, in ServiceNow, select **System Definition > Fix Scripts** and open the **Symphony Agent Upgrade Cleanup**.
3. Click **Run Fix Script** and select **Proceed in Background**.

NOTE Do not select **Proceed**. Part of the cleanup script includes table schema changes which can cause instance errors if the transaction is cancelled or interrupted.

4. To monitor the progress of the script, use the **Show Progress Workers** link.
Like the update set, this script makes changes to table schema and may take some time to process, depending on the number of records in the Task table.
5. Once the Fix script is completed, continue with the Configuration.

Chapter 5

Configuring ServiceNow Properties

Configuring Application Properties

The seven System properties must be configured to set the global behavior for the Symphony Agent.

1. Sign in to ServiceNow as a System Administrator.
2. In the **Filter Navigator**, enter **Symphony**.
3. In the **Symphony** section, select **Application Properties**.
4. Select the task table where Symphony alerts are sent. Options are **Incident** or **Case**.

NOTE Once the table is specified, it should not be changed.

5. Select the location where the link to the Incident/Case should be opened. Options are **Platform View** or **Agent Workspace**.
6. Specify the numerical value applied to a ticket when Symphony closes a ticket.
7. Specify the numerical value applied to a ticket when the Symphony ticket is **Resolved** or **Close Pending**.
8. Specify the numerical value applied to a ticket when the Symphony ticket is set to one of the following:
 - **New**
 - **Open**
 - **Awaiting Info**
9. Specify the numerical value applied to a ticket when the Symphony ticket is **Resolved** or **Closed**.
10. Select or clear the **Yes|No** check box to determine if the Symphony TAL Adaptor should log additional debugging info.

TIP It is recommended this check box be cleared unless a known problem exists.

Creating Symphony Instances in ServiceNow

The **Symphony Instance** must be created with data provided by AVI-SPL for an account.

1. Sign in to ServiceNow as a System Administrator.
2. In the **Filter Navigator**, enter **Symphony**.
3. In the **Symphony** section, select **Symphony Instances**.
4. Click **New**.

The **Symphony Instance > New record** page is displayed.

5. Enter a **Name** for the Instance.
6. In the **URL** field, enter the Symphony ServiceNow Adapter URL in the following format:
symphony.url
7. In the **Credentials** field, select the  icon and on the **Basic Auth Configurations** window, select the name of the Credential that should be applied.

TIP To create a new Credential:

1. On the Basic Auth Configurations window, Click **New**.
2. Complete all available fields:

Field	Format	Example
Username	symphony.auth.username	ticket_sync_agent@avispl.com
Password	symphony.auth.password	password

3. Click **Submit**.

8. If applicable, in the **MID Server** field, select the  icon and on the **Mid Servers** window, select the MID server for outbound communication.

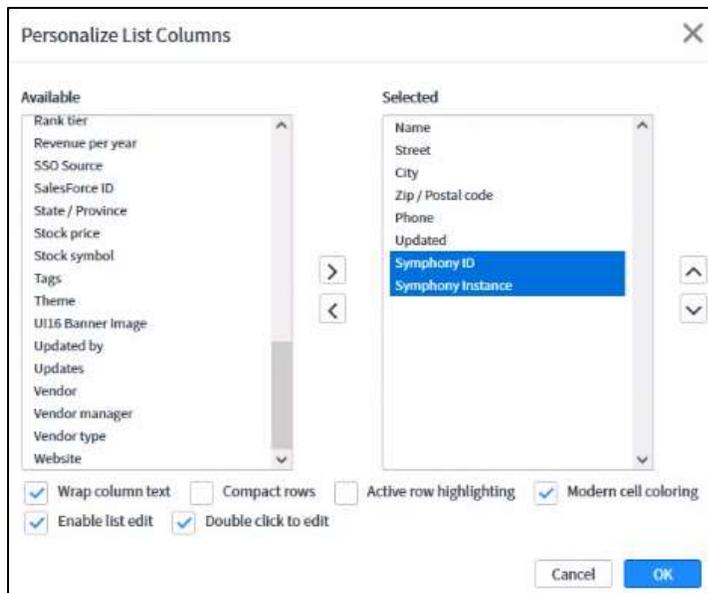
TIP To create a new MID Server:

1. On the Mid Servers window, Click **New**.
2. Complete all available fields.
3. Click **Submit**.

9. Select **Submit**.

Associate an Instance with a Company Record

1. Sign in to ServiceNow as a System Administrator.
2. In the **Filter Navigator**, enter **Companies**.
3. In the **User Administration** section., select **Companies**.
The **Companies** table is displayed.
4. Select the  icon.
The **Personalize List Columns** window is displayed.
5. In the **Available** column, select **Symphony ID** and **Symphony Instance** and select  to move each field to the **Selected** column.



6. Click **OK**.

The **Companies** table is updated with the **Symphony ID** and **Symphony Instance** columns.

7. In the **Symphony ID** field, enter the Customer ID.

TIP This is a 32-character, hyphenated hexadecimal number previously provided by AVI-SPL.

8. In the **Symphony Instance** column, select the  icon.

The **Symphony Instances** window is displayed.

9. Select the Instance record created in the previous section.

Chapter 6

Configuring Symphony Properties

This section explains how to configure Ticket Adapter and ServiceNow instance properties. After configuration, the ticket sync process between Symphony and ServiceNow is complete.

The complete configuration process includes:

- Configure Symphony ticket adapter.
- Test the ticket synchronization.

These tasks are completed by an AVI-SPL resource with the Account Administration role in Symphony.

Prerequisites

Before configuring the Synchronization properties ensure the:

- ServiceNow instance exists.
- MID server works and is valid, if required.
- Update Set is applied and the manual configuration steps are completed.
- Ticket event for violated thresholds is turned off in Symphony.

Configuring Symphony Ticket Adapters

Managed Services customers do not perform this procedure; the Service Readiness team completes this. Customers with Symphony on Prem (SYOP) or Symphony as a Service (SYAAS) are responsible for completing this procedure.

1. Sign in to the Symphony portal.
2. In the left navigation pane, select **Administration > Configuration**.
The **Configuration for *account name*** is displayed.
3. Select **Monitoring > Monitoring Restrictions**.
4. In the **Generate a new ticket when a threshold is violated** field, select **Never**.
5. Select **Update**.
The **Configuration for *account name*** is displayed.
6. Select **Tickets > Adapter Configuration**.
7. On the **Tickets Adapter** drop-down list, select **Customer Ticketing Solution**.
8. On the **Type** drop-down list, select **TAL ServiceNow**.
9. Complete the following fields:

Property Name	Description	To obtain value	Example
URL	URL of ServiceNow instance	Copy from instance	https://dev12345.service-now.com/
login	ServiceNow instance Admin User	Create a MID server user or enter the ServiceNow instance admin user credentials	admin
password	Password	Enter the sign in in password.	password
API Path	REST API endpoint on the instance	Review the Scripted REST APIs under Symphony and ServiceNow.	/api/224486/symphony Typically, this is the value. If not, contact AVI-SPL. This should match the data provided in the Update Set.
Url Pattern To Insert Ticket	REST resource to synchronize Task data	Review the Scripted REST APIs under Symphony and ServiceNow.	/task Typically, this is the value unless AVI-SPL has determined and communicated that a different value must be set.
Url Pattern To Add Attachment	REST resource to add an attachment to a Task	Review the Scripted REST APIs under Symphony and ServiceNow.	/task/{id}/attachment?file_name=(file_name) Typically, this is the value unless AVI-SPL has determined and communicated that a different value must be set.
Url Pattern To Delete Attachment	REST resource to delete an attachment from a Task	Review the Scripted REST APIs under Symphony and ServiceNow.	/attachment/{id} Typically, this is the value unless AVI-SPL has determined and communicated that a different value must be set.

10. Select **Update**.

Test Ticket Synchronization

Managed Services customers do not perform this procedure; the Service Readiness team completes this. Customers with Symphony on Prem (SYOP) or Symphony as a Service (SYAAS) are responsible for completing this procedure.

This requires access to the Symphony Portal Ticket Management and Task access in the Symphony Client Instance.

1. Using the Symphony portal, create a ticket for a device.
2. Open the ticket.
3. On the **TAL ServiceNow** tab, review the **Sync Status** field.

If the field states...	Then
Success,	the Symphony configuration piece is working correctly.
Pending,	Symphony is trying to synchronize the ticket with ServiceNow until ServiceNow confirms the configuration was completed successfully.

4. Select **Open this case in TAL ServiceNow** and, if prompted, login to ServiceNow.
5. Update the task in ServiceNow.

The following fields are synchronized:

Task Table	ServiceNow Field	Symphony Field
Both	Short description	Subject
Both	Description	Description
Both	Priority	Priority
Case	State	Status
Incident	Incident state	Status
Case	Contact	Ticket Created By
Incident	Caller	Ticket Created By
Both	Assigned to	Assigned To
Both	Resolution notes	Resolution notes
Both	Resolution code	Resolution
Both	Attachments	Attachments
Both	Comments	Comments

6. In Symphony, open the test ticket form and review the field mapping.

If the update...	Then
Occurred correctly,	The configuration is complete.
Did not occur correctly,	The ServiceNow and Symphony settings must be reviewed with the customer.