Get started with On-demand DataSync

Fluorine+

Perspectium On-demand DataSync gives you the power to provision an Amazon Web Services (AWS) EC2 instance, DataSync agent, and Relational Database Service (RDS) in your AWS account that will handle the syncing of your ServiceNow incident data. Plus, once your incident data is synced in your RDS, you can then view predefined dashboards with **Incident Analytics**, giving you better insight into your incident management processes.

NOTE: If you previously created a Perspectium On-demand DataSync AWS stack, contact Perspectium Support for a guided setup of On-demand DataSync and Incident Analytics.

Prerequisites

⚠️ First, you will need an active ServiceNow instance (any version).

⚠️ You will also need to create and activate an AWS account.

⚠️ If using Perspectium Incident Analytics (preconfigured Tableau dashboards to visualize your ServiceNow incident data), you will need Tableau version 10.2 or higher.

Procedure

To set up On-demand DataSync and Incident Analytics, follow these steps:

1

Access the Perspectium On-demand DataSync app

Log into your AWS account. Then, go to the AWS Marketplace and search for **Perspectium On-demand DataSync**. On the app landing page, click **Continue to Subscribe** in the upper right-hand corner of the screen.

On the **Subscribe to this Software** page, click **Accept Terms** to accept the terms of the Perspectium End User License Agreement (EULA) and the AWS Customer Agreement. Then, wait for your request to be processed and click **Continue to Configuration**.

2

Start CloudFormation launch

On the **Configure this software** page, choose **Perspectium On-demand DataSync Deployment** from the **Fulfillment Option** dr opdown. Then, choose a **Software Version** and the **Region** where your AWS server is located and click **Continue to Launch** in the upper right-hand corner of the screen.

On the **Launch this software** page, choose to **Launch CloudFormation** from the **Choose Action** dropdown.

3

Launch CloudFormation

On the **Select Template** page, make sure the **Specify an Amazon S3 template URL** is selected and the URL is populated from subscribing to the app.

Finally, click **Next**.

4

Configure your AWS stack settings

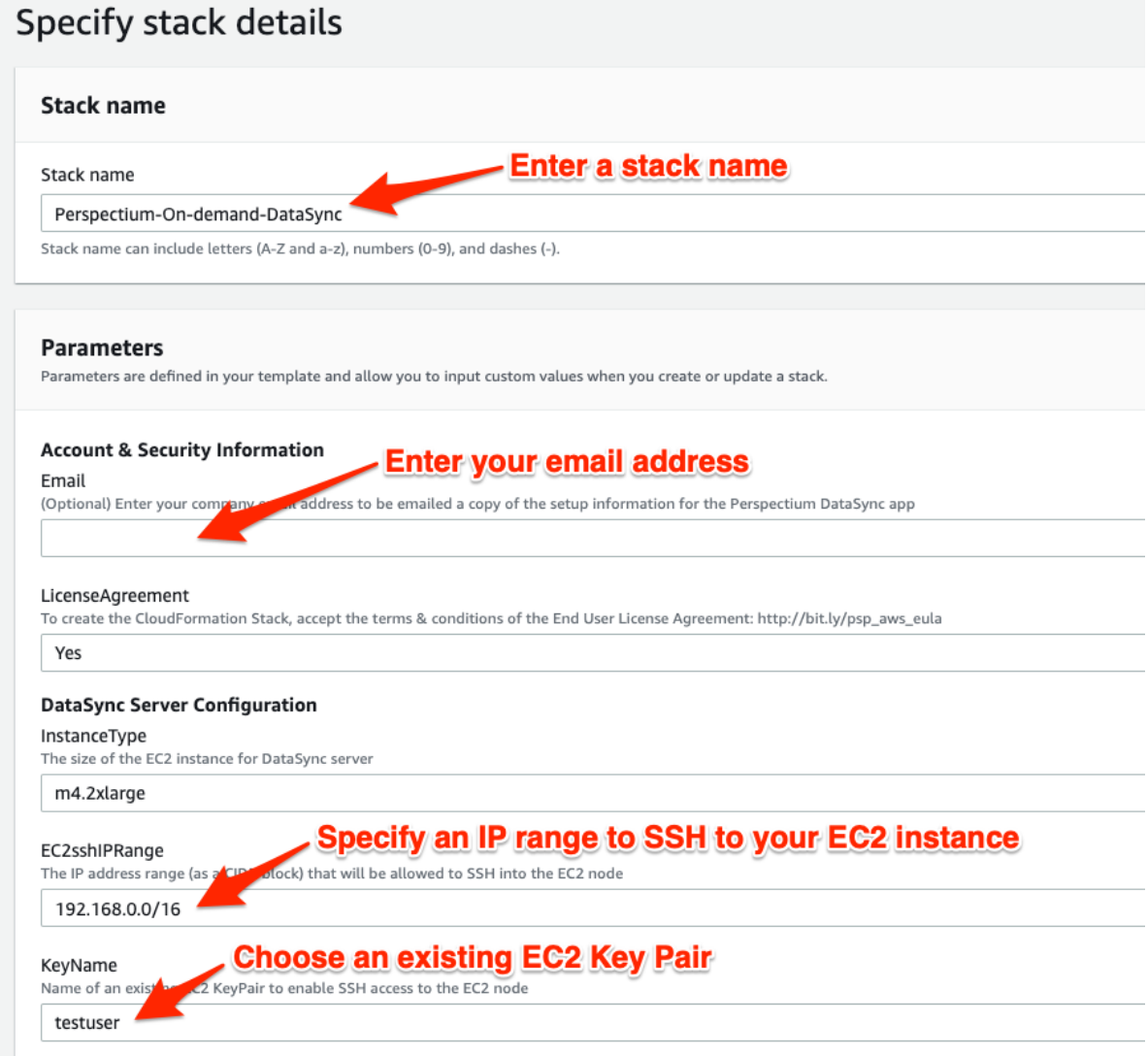
On the resulting page, type a name for your **Stack name** consisting of letters, numbers, and dashes (e.g., Perspectium-On-demand-DataSync).

Under **Parameters** and in the **Account & Security Information** section, enter your **Email Address** and accept the **License Agreement**.

Next in the **DataSync Server Configuration** section, select an AWS **Instance Type** for the EC2 instance where the DataSync agent will run on, specify a range of IP addresses (as a CIDR block; e.g. 192.168.0.0/16, 0.0.0.0/0, etc.) in the **IPRangeforEC2SSH** field that will be able to SSH to your EC2 instance where the DataSync Agent is running.

Then, choose a previously created EC2 Key Pair for authentication when accessing your EC2 instance via SSH.

blocked URL **NOTE:** If you haven't already created an EC2 Key Pair, you can create one within your AWS account or using a command line interface.



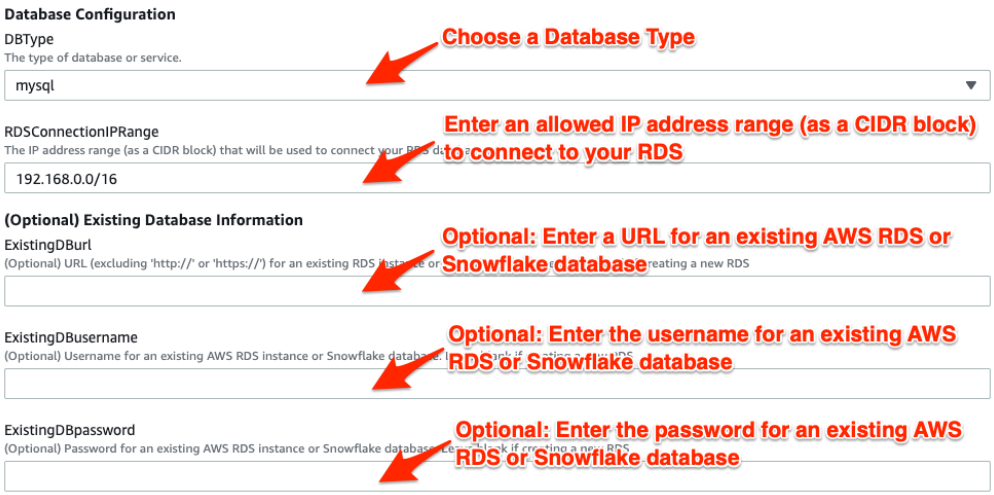
In the **Database Configuration** section, choose the **Database Type** that you want to sync your ServiceNow incident data with from the **DBType** field.

Then, specify a range of IP address (as a CIDR block; e.g. 192.168.0.0/16, 0.0.0.0/0, etc.) used to connect to your AWS RDS.

blocked URL **NOTE:** This should include the IP address of the EC2 instance created with this stack so the DataSync Agent can connect to the RDS to save data. It is recommended you use the value of **0.0.0.0/0** and then change it after the stack has completed to update to the IP address of your EC2 instance if you want to restrict access to only the instance.

You can optionally enter an existing RDS (if you have already created one in your AWS account) or Snowflake database to use by entering its URL and credentials in the **ExistingDBurl, ExistingDBusername** and **ExistingDBpassword** fields.

blocked URL **NOTE: Snowflake** requires you enter an existing Snowflake database as Snowflake currently cannot be created through an AWS CloudFormation.



Finally, click **Next** to go on to the **Configure stack options** page.

5

Configure stack options (optional)

The **Configure stack options** page contains some optional configurations you can set for your ServiceBond EC2 instance. For more information on these configurations, see setting AWS CloudFormation Stack Options.

However, in most cases, you can simply accept the default options on this page and click **Next** at the bottom of the page to navigate to the **Review** page and review your EC2 instance settings.

6

Review and launch your AWS stack

At the bottom of the **Review** page, check the box to acknowledge that AWS CloudFormation might create IAM resources. Then, click **Create stack** to finish configuring your ServiceBond EC2 instance.

blocked URL **NOTE:** Your EC2 instance will take approximately 15-20 minutes to fully initialize. You can confirm that your EC2 instance is ready by navigating to **Services** > **EC2** (under **Compute**) > **Instances**. Your EC2 instance will be ready when the blocked URL icon appears in the **Status Checks** column for your instance.

7

View your Setup Information

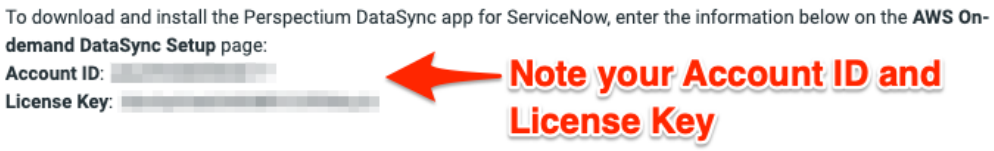
After the CloudFormation stack has completed, the DataSync Agent will be installed in the EC2 instance at **/home/ec2-user/perspectium/Perspectium_Replicator_Agent**. The Agent will have the following folder structure:

```
drwxrwxr-x 5 ec2-user ec2-user 4096 Oct 26 06:35 bin
drwxrwxr-x 2 ec2-user ec2-user  165 Oct 26 05:59 conf
drwxrwxr-x 2 ec2-user ec2-user   25 Jun 19 20:03 extlib
drwxrwxr-x 2 ec2-user ec2-user 8192 Jun 19 20:03 jars
drwxrwxr-x 5 ec2-user ec2-user  104 Jun 19 20:03 lib
drwxrwxr-x 2 ec2-user ec2-user   84 Oct 26 06:47 logs
-rw-rw-r-- 1 ec2-user ec2-user   64 Jun 19 18:27 README.txt
drwxr-xr-x 2 root     root      143 Oct 26 05:59 tmp
drwxrwxr-x 2 ec2-user ec2-user   48 Jun 19 20:03 Uninstaller
```

Your setup information will be saved in the file **/home/ec2-user/perspectium/Perspectium_Replicator_Agent/conf/perspectium_setup_information.txt** on the EC2 instance created. If you entered your email address in the **Parameters** in **Step #4**, you will receive an email from Perspectium Support confirming that your Perspectium On-demand DataSync stack has been configured. Next complete either **Step #7a** or **Step #7b** as applicable:

7a) New to Perspectium?

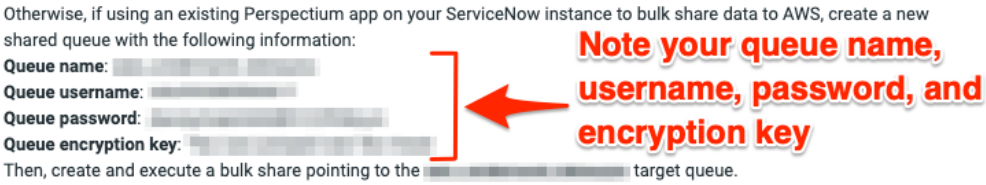
If this is your first time using a Perspectium product, note your **Perspectium Account ID** and **Perspectium License Key** in the setup information file or your confirmation email. You will need to enter this information on the **AWS On-demand DataSync Setup** page in **Step #10**. But for now, proceed to **Step #8**.



7b) Already using a Perspectium for ServiceNow app?

> To enable On-demand DataSync with your existing Perspectium app, you must have at least the Fluorine Patch 1 of the Perspectium app. So the DataSync agent can create tables in the database properly, select the **Share schema** option enabled under the **Advanced** tab in your **bulk share**. If you would like to use the Tableau Incident Analytics in the steps below, enable the **add display values** option enabled in Replicator Properties.

If you have already installed a Perspectium app on your ServiceNow instance and are comfortable creating ServiceNow shared queues and bulk shares, you can use the **Queue name**, **Endpoint URL**, **Queue username**, **Queue password**, and **Queue Encryption Key** in the setup information file or your confirmation email to create a new ServiceNow shared queue in your instance.



Then, create a ServiceNow bulk share pointing to the target queue and proceed to **Step #12**.

8

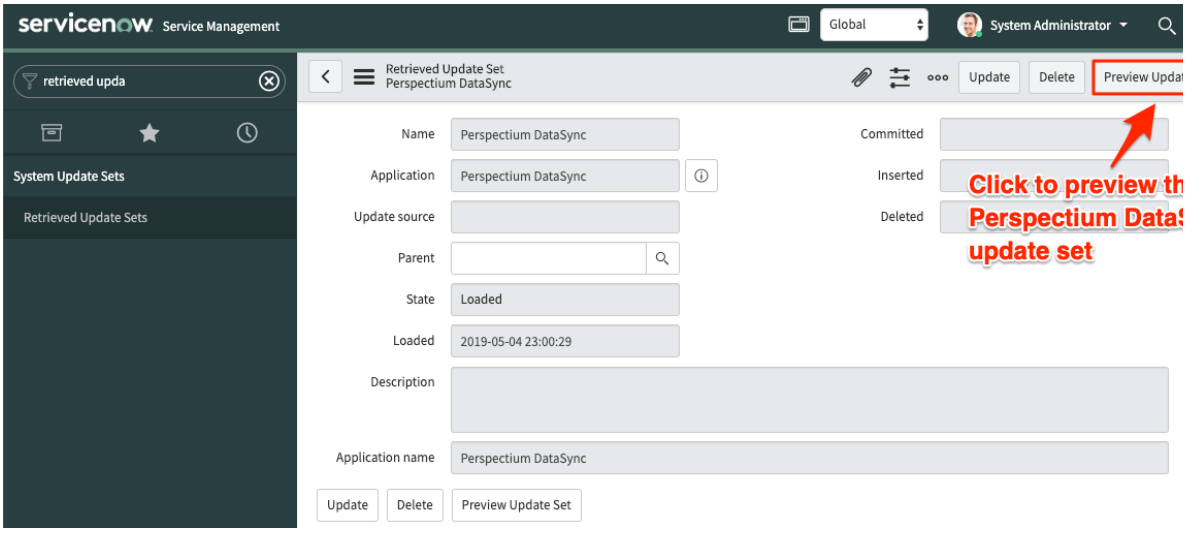
Download the DataSync for ServiceNow app

Download the Perspectium DataSync for ServiceNow app here, and note the directory where you save the file.

9

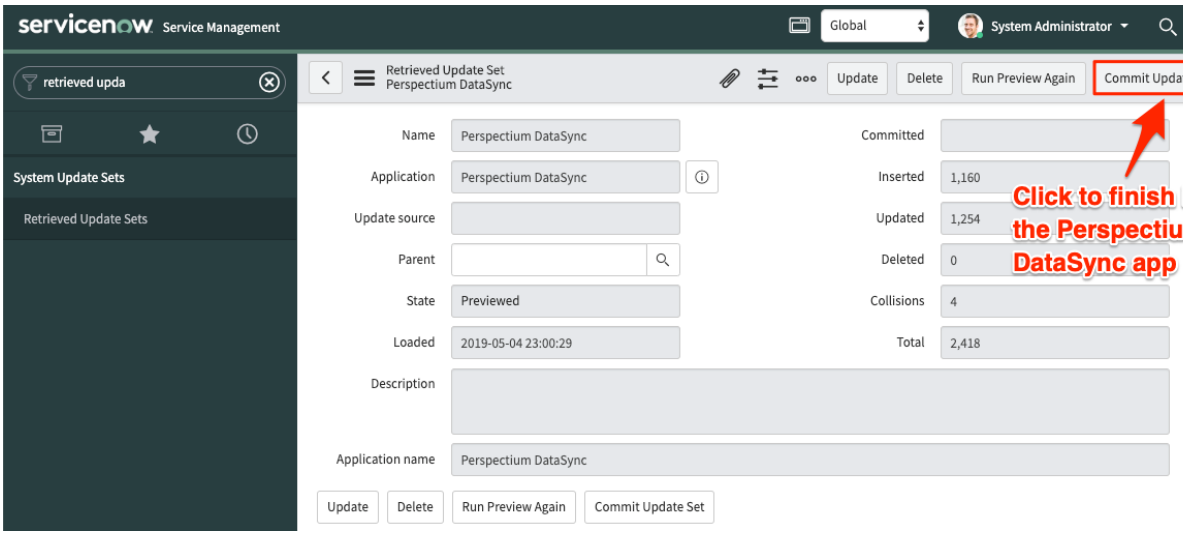
Install the DataSync for ServiceNow app

Log into your ServiceNow instance and use the Filter Navigator to navigate to **System Update Sets** > **Retrieved Update Sets**. In the resulting form, click **Import Update Set from XML** under the **Related Links** section. Upload the Perspectium DataSync update set (.xml file) from the directory you saved the file in for **Step #8**. Then, click into the Perspectium Data Sync update set and click **Preview Update Set**.



After Preview Update Set finishes running, close out of the pop-up and check if there are any errors or warnings. If errors or warnings have occurred, they will appear in the list at the bottom of the form under the **Update Set Preview Problems** tab. Check the box next to each error or warning and choose whether to **Accept remote update** or **Skip remote update**. To view previously configured fields and updates that may be affected for each error or warning, click **Show local field** and/or **Show local update**. For more information, see preview a remote update set.

Once any errors or warnings have been addressed, click **Commit Update Set** in the upper right-hand corner of the form. After Update Set Commit finishes running, close out of the pop-up.



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Set up your DataSync app

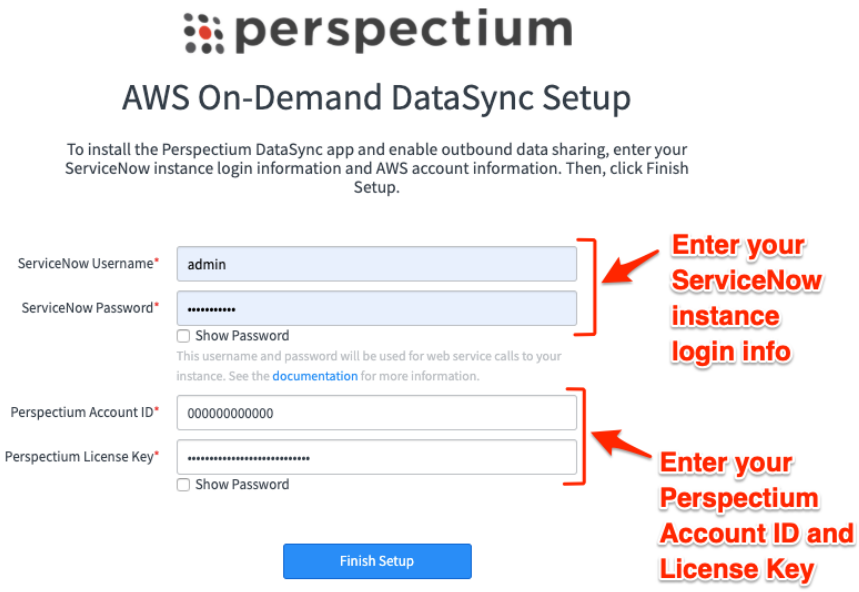
In ServiceNow's Filter Navigator, navigate to **Perspectium DataSync** > **Control and Configuration** > **Setup**. On the **User Agreement** page, read through the terms of the Perspectium User Agreement and then click **I Accept** to accept these terms.

On the **AWS On-demand DataSync Setup** page, enter your ServiceNow username and password in the appropriate fields.

blocked URL **NOTE:** The ServiceNow user must have the role of **admin**.

Then, enter the **Perspectium Account ID** and **License Key** from the file **/home/ec2-user/perspectium /Perspectium_Replicator_Agent/conf/perspectium_setup_information.txt** on the EC2 instance or from your confirmation email in **Step #7** and click **Finish Setup**.

NOTE: If you change your ServiceNow password after entering it on the AWS On-demand DataSync Setup page, you will need to update your **ServiceNow Password** in your Perspectium Properties by navigating to **Perspectium DataSync** > **Control and Configuration** > **Properties** and then clicking **Save** after updating your password. For more information about using Perspectium DataSync, see DataSync for ServiceNow.



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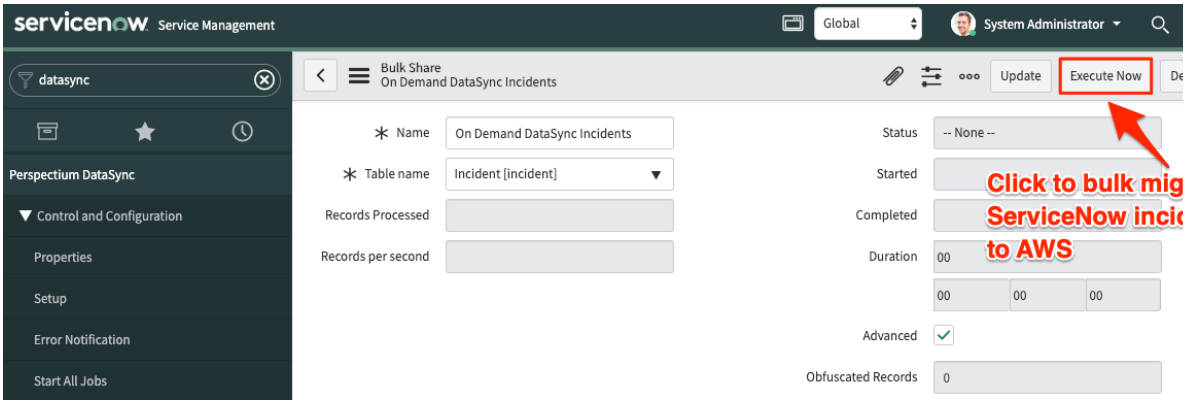
Run your ServiceNow bulk share

> So the DataSync agent can create tables in the database properly, select the **Share schema** option enabled under the **Advanced** tab in your **bulk share**. If you would like to use the Tableau Incident Analytics in the steps below, enable the **add display values** option enabled in Replicator Properties.

You will then be automatically redirected to the Perspectium **Bulk Share** list view. Click into the **On Demand DataSync Incidents** bulk share record and then click **Execute Now**, which will initiate the bulk migration of your existing incident data from ServiceNow to your AWS RDS.



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(Optional) Open your preconfigured Tableau workbook

Download and then open one of the following preconfigured Incident Analytics workbooks for Tableau per the **Database Type** you selected in **Step #4:**

Database Type	File to download
MySQL	Incident Analytics for MySQL
Oracle	Incident Analytics for Oracle
MS SQL Server	Incident Analytics for MS SQL Server

blocked URL **NOTE:**

- If using a Tableau version higher than **10.2**, a pop-up will appear asking you to confirm upgrade to your current Tableau version. Click **OK** to accept this upgrade.
- If you have your own Tableau data visualizations that you want to use for ServiceNow data other than **incident** data, you can skip **Steps #12-15**.
- These workbooks require you replicate the **incident** and **task_sla** tables.
- After entering your data source information, the dashboards will default to using a **psp_repl** database. If the **incident** and **task_sla** tables are located in a different database, you may be required to change it under the **Data Source** tab in Tableau.

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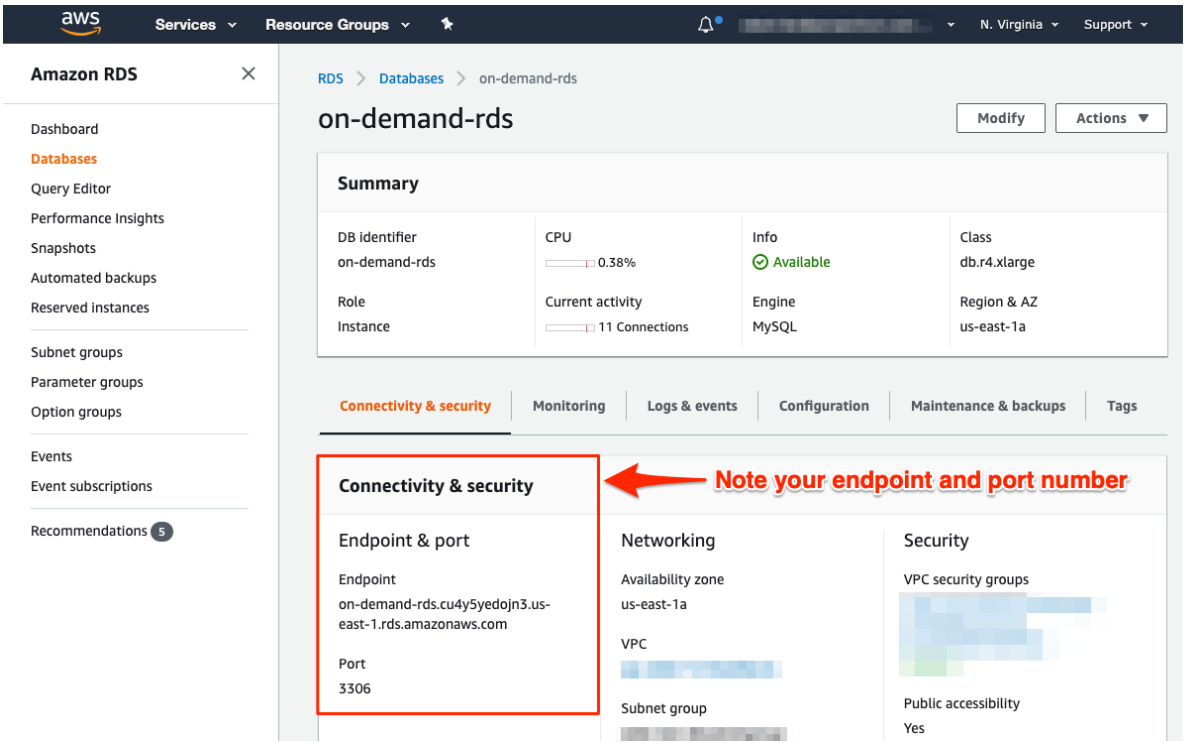
(Optional) Connect Tableau to your AWS RDS

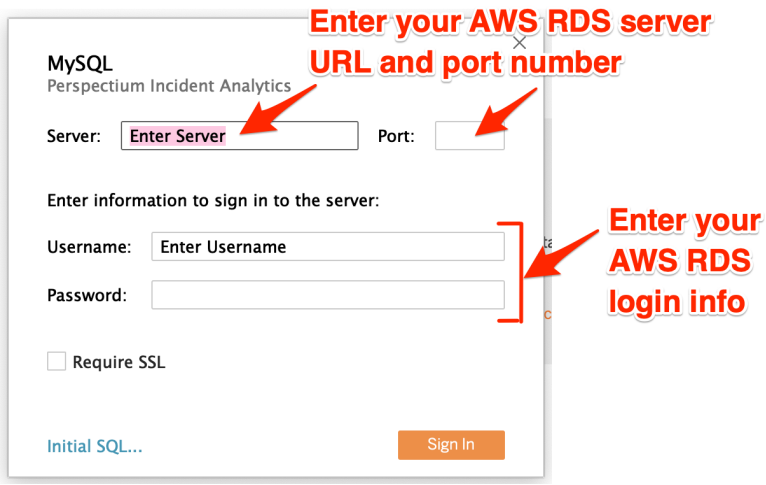
Locate your AWS RDS connection information by logging into your AWS account and navigating to **Services** > **RDS** (under **Database**) > **DB Instances** (under **Resources**). Click the name of the stack you created in **Step #4**. Note your **Endpoint** and **Port** under the **Connectivity & Security** tab.



Back in Tableau, enter your database **Server URL** (as your AWS RDS **Endpoint** URL) and **Port** number. Enter the **Username** and **Password** from the file **/home/ec2-user/perspectium/Perspectium_Replicator_Agent/conf/perspectium_setup_information.txt** on the EC2 instance or from your confirmation email from Perspectium Support in **Step #7**. If you didn't receive this email or do not have this setup file, contact Perspectium Support.

NOTE: If you opted to use an existing RDS in **Step #4**, you must update or create a database user in your RDS database with the **Username** of **admin** and the password given in the setup information file or confirmation email.

Enter this information into the appropriate fields and then click **Sign In** to finish connecting your Tableau workbook to your AWS RDS. Five preconfigured Tableau dashboards will then populate with the incident data that was bulk migrated from your ServiceNow instance to your AWS RDS.



NOTE: If connecting to an **Oracle** database, enter **pspdb** in the **SID** field.

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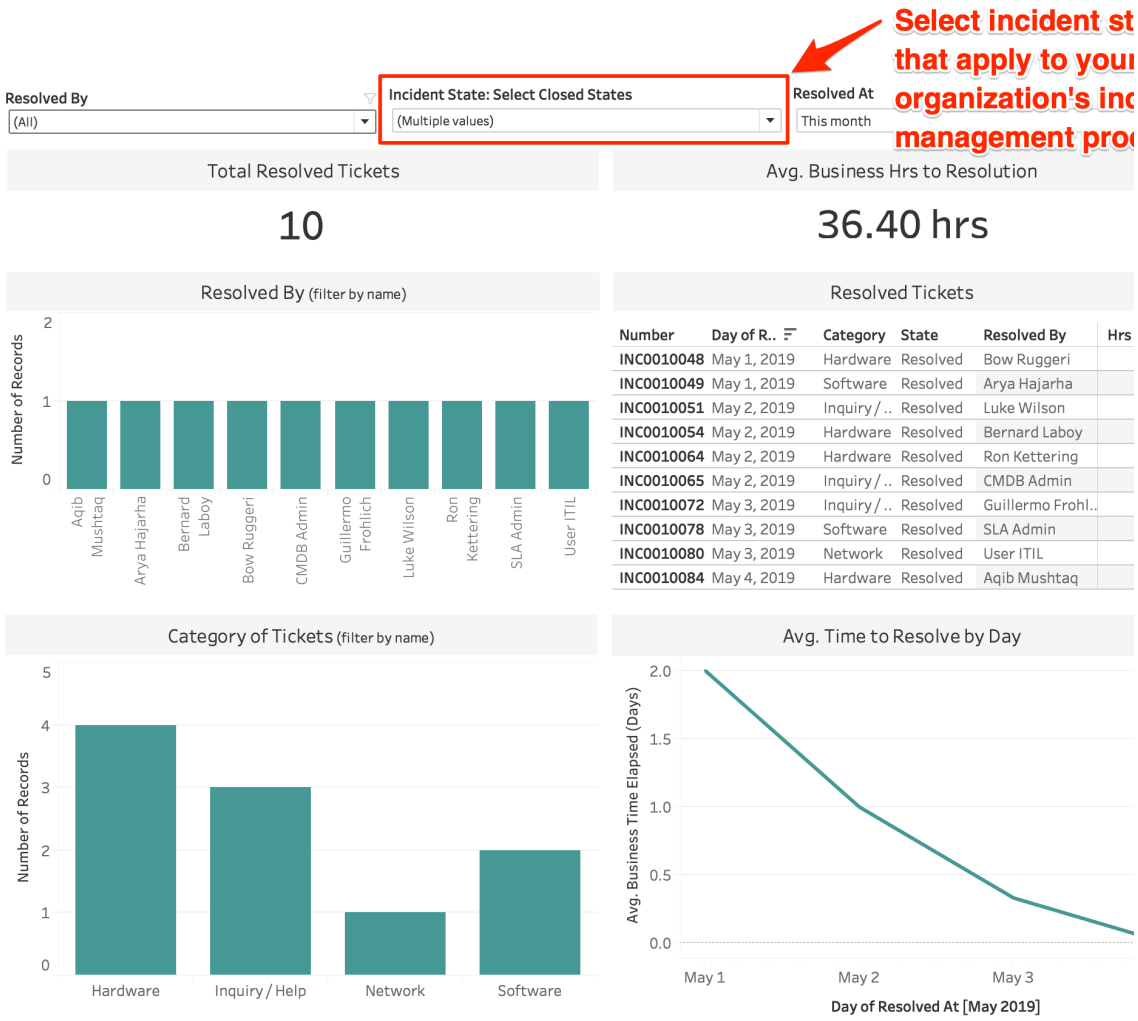
(Optional) Choose Open and Resolved incident types

Click the **Open and New Incidents** dashboard. Then go to **Incident State: Select Open States** and check all options that apply to **Open** states for incidents per your organization's incident management process. Then, click the **Resolved Incidents** dashboard, go to **Incident State: Select Closed States** and check all options that apply to **Resolved** per your organization's incident management process.



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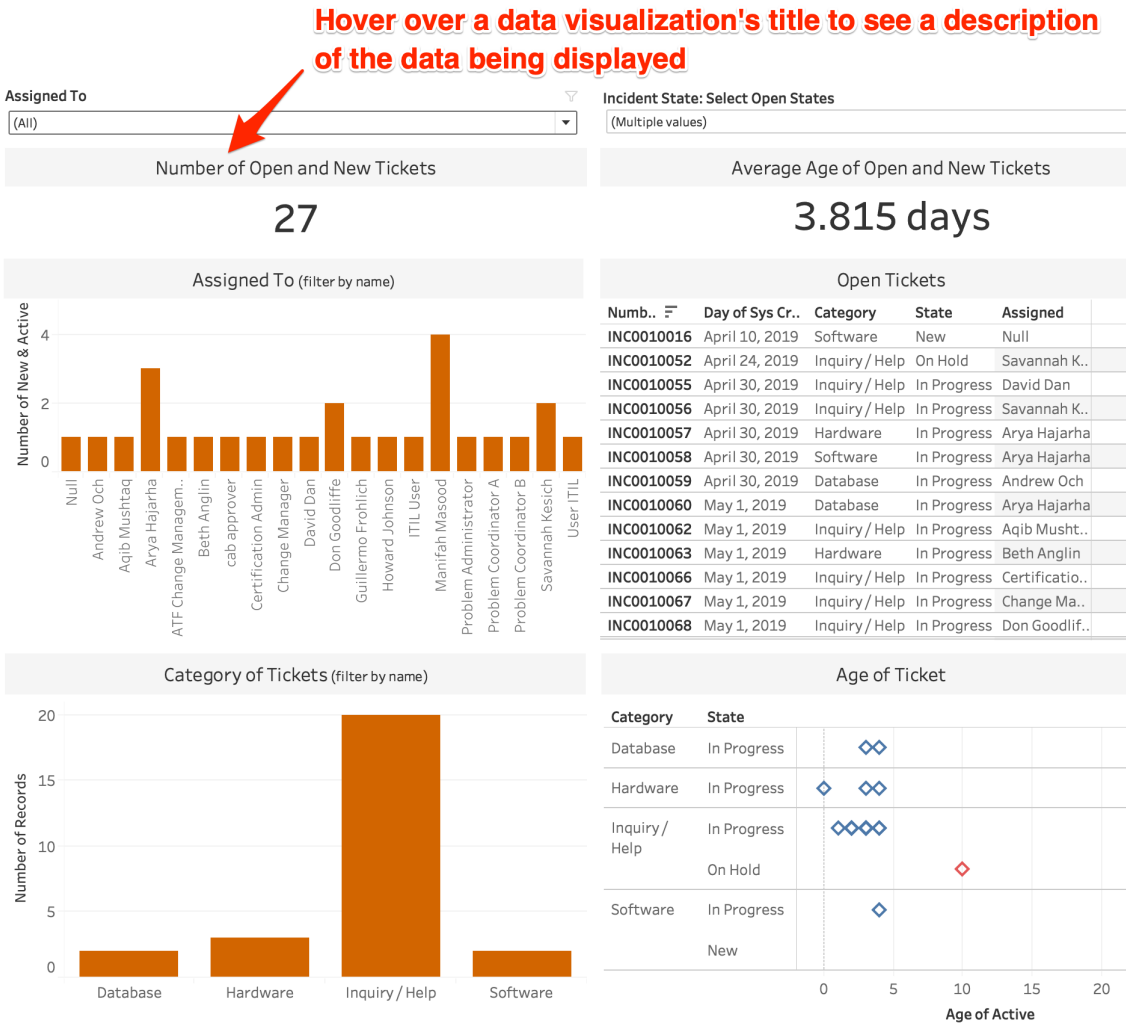
(Optional) View Perspectium Incident Analytics dashboards

Perspectium's preconfigured Incident Analytics dashboards provide you with a variety of data visualizations for the incidents managed by your organization, including:

Visualization	Description
Avg Hours to Close	Displays the time that the incidents were closed on and the average number of hours to close
Volume of incidents	Displays the volume of incidents per hour
Resolved by	Displays the magnitude of the number of incidents that a user resolved.
Category of incidents	Displays the number of incidents per category
Assigned to	Displays the number of open incidents assigned to a user. Click on a user to filter all charts by name
Age of Incident	Displays how long an incident has been open (in days) along with the category and current state

NOTE: To learn more about each Incident Analytics data visualization, hover over the title for a visualization to see its description.



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Try out Perspectium On-demand DataSync

If you are new to Perspectium, browse through other DataSync for ServiceNow topics to find out more about how to leverage the power to sync, transform, and visualize your ServiceNow data in various other data stores.

Having trouble setting up On-demand DataSync & Incident Analytics?

Post your inquiry on the Perspectium Community Forum or contact Perspectium Support for more help.

Similar topics

- Get started with On-demand DataSync

Contact Perspectium Support

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support@perspectium.com