User Manual: Azure RDS Manager

Prepared for

Service Providers

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Revision and Signoff Sheet

Change Record

Date	Author	Version	Change Reference
March 16, 2018	Manish Dhall	1.0	Initial draft for review/discussion

Reviewers

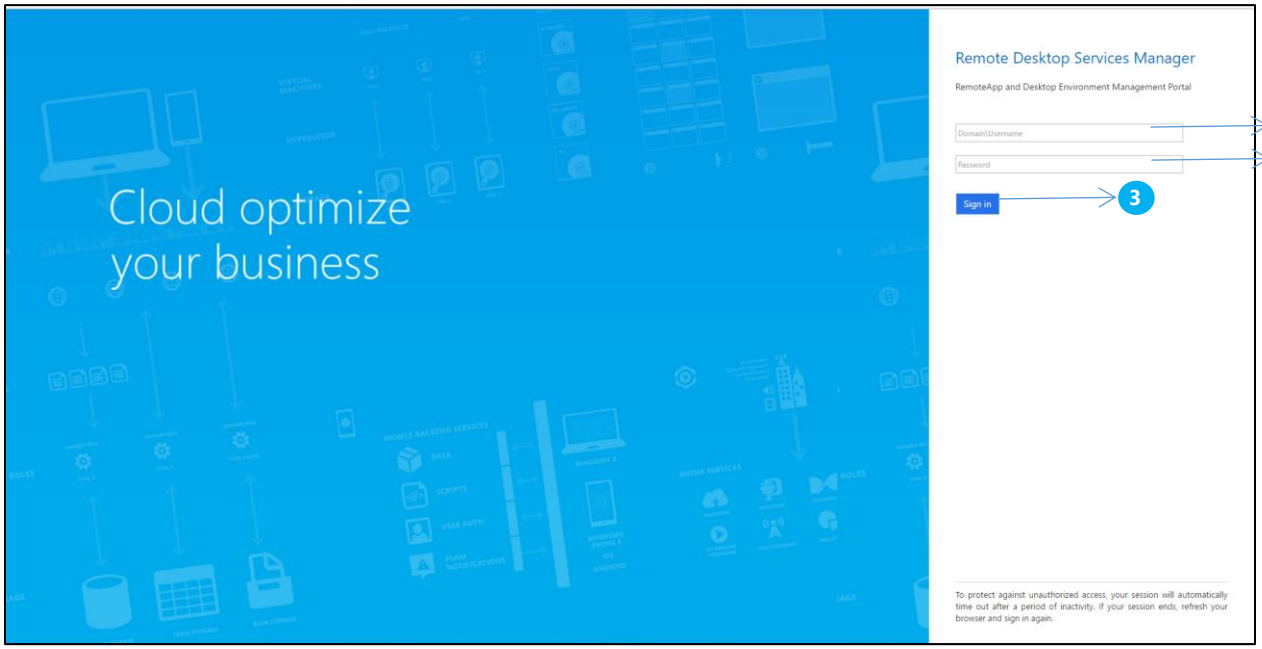
Name	Version Approved	Position	Date

Table of Contents

Introduction

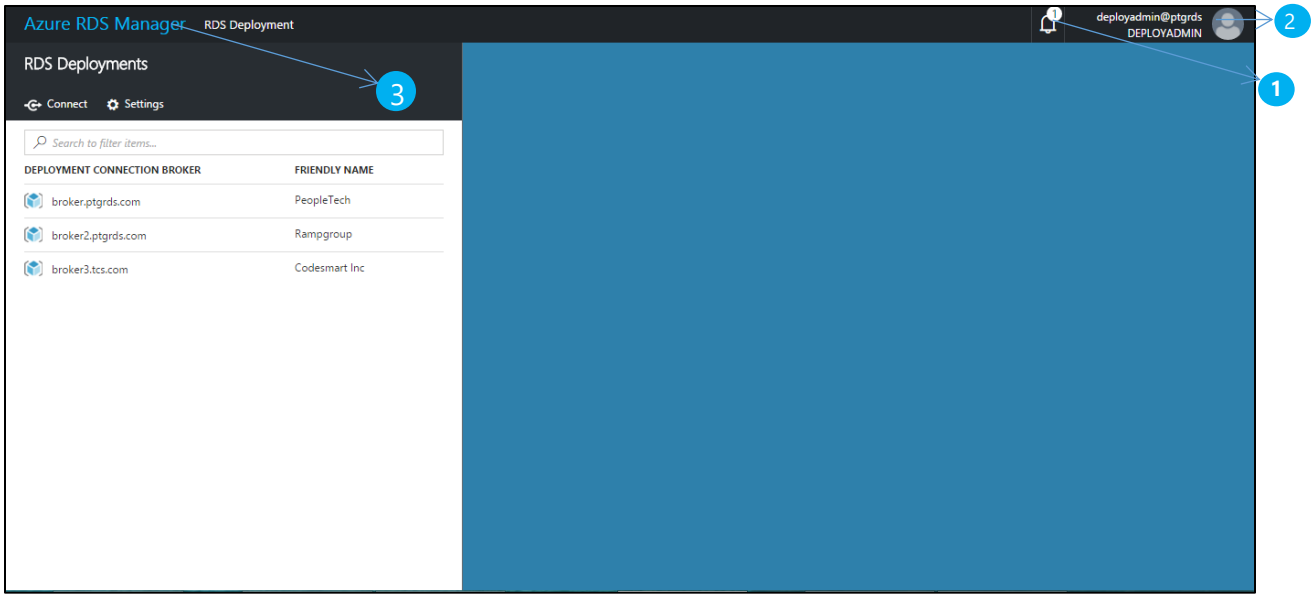
This document provides a step-by-step guide using the Azure RDS Manager Application.

Login Page



1. Provide your username in the form of Domain Name\Username
2. Provide Password
3. Click **Sign-In**

Understanding the Dashboard Page



1. Notification Reminder
    - This notifies you about the status of all your actions performed in the application. It provides brief information about each action performed
2. Logged In Username
    - The Username along with the domain name is displayed here. Click to be provided with an option to sign-out of the application
3. Breadcrumbs
    - This tracks the user's navigation from blade to blade. You can traverse to a specific blade by clicking on any breadcrumb name

Manage Deployments

The **RDS Manager Application portal** allows you to add RDS deployments. The first blade of the **Dashboard** page lists all deployments that have been added to the account. As a DeployAdmin, you can manage the Deployments.

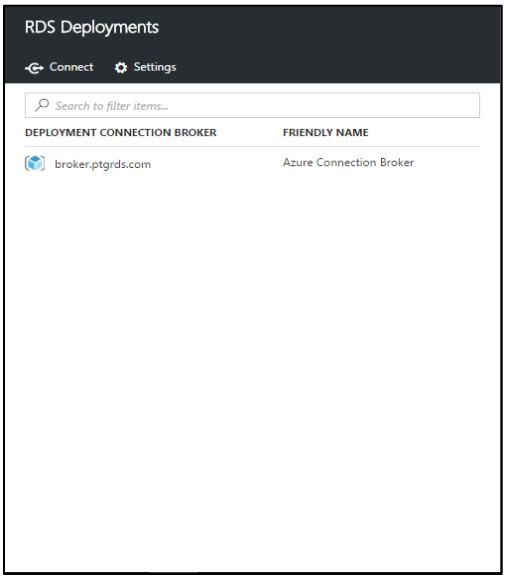


Figure 1. List of Connected Deployments

Create a New Deployment

Use the following steps to create a new deployment:

1. Click **Connect** on the RDS Deployment blade. It will open a blade with two required sections
    - Connection Broker Information
    - Azure Credentials
2. RDS Manager adds an RDS subscription into the application by its Connection Broker virtual machine name. Select **01 Connection Broker** and provide the required information about Connection Broker

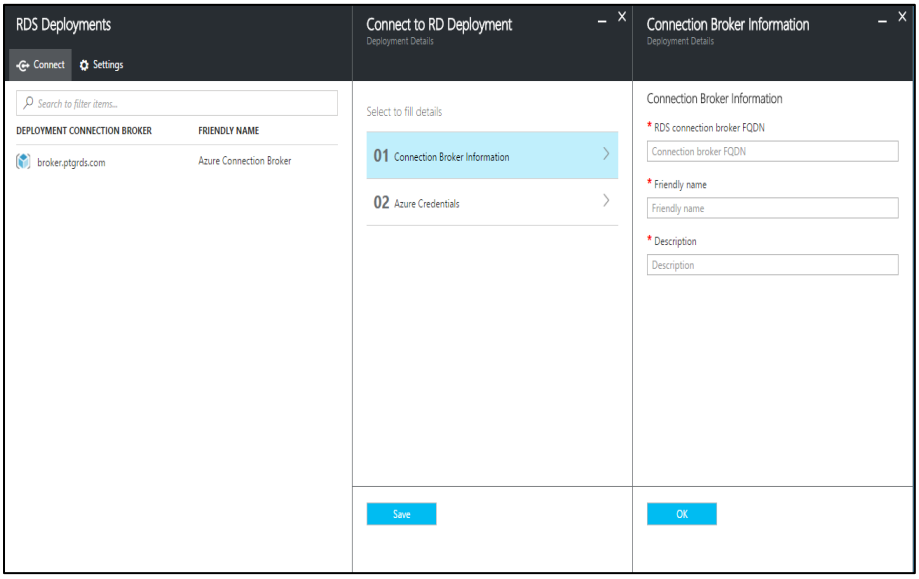


Figure 2. Connection Broker information input form

3. Select **02 Azure Credentials**, then specify the username, password, Azure-subscription ID, and the Resource Group Name. Click **OK** to continue.

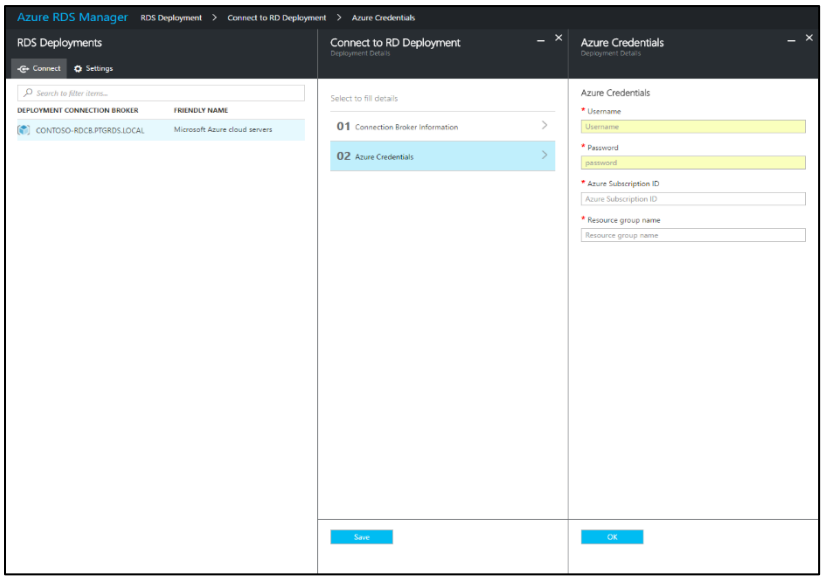


Figure 3. Azure Credentials information input form

4. After completing both **01 Connection Broker** and **02 Azure Credentials**, click **"Save"**

Rename an Existing Deployment

Use the following steps to rename an existing Deployment.

1. Click on the desired Deployment from the list of deployments shown in the Deployments blade
2. A new blade will open containing options to manage your selected deployment
3. Click **Rename**
4. A new blade will open that contains:
    a. Friendly Name
    b. Description
    c. The existing friendly name of the selected Deployment will automatically populate the text box.
5. Remove the existing name and specify a name for the new deployment, then click **OK**

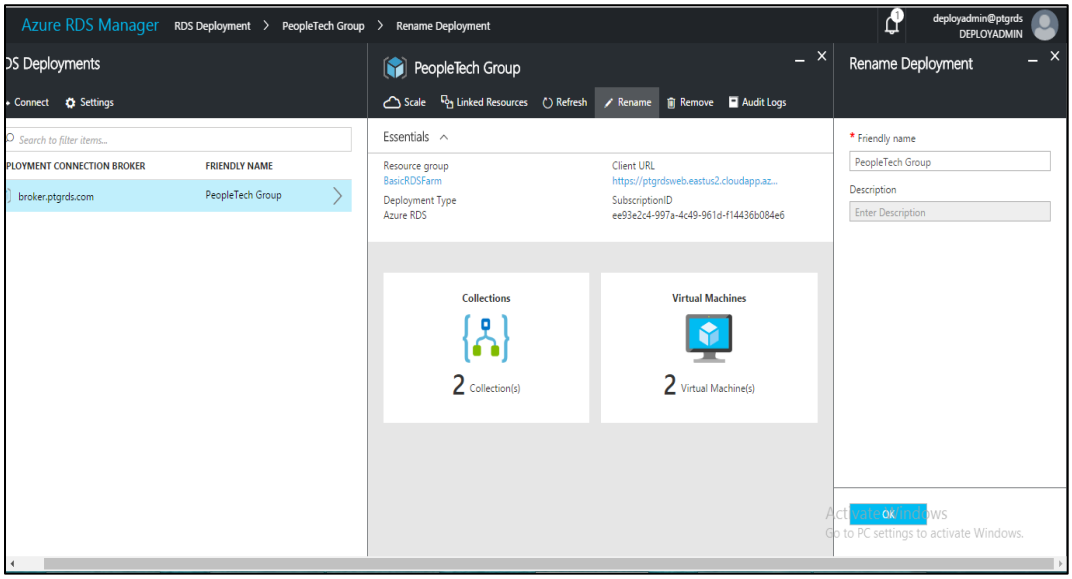


Figure 4. Deployment Rename information form

6. After clicking **OK**, your deployment's friendly name will be updated

Remove an Existing Deployment

Use the following steps to remove a Deployment:

1. Click the desired Deployment from the list of deployments shown in the Deployments blade
2. A new blade will open containing options to manage your selected deployment
3. Click **Remove**
4. A confirmation dialogue will open with two options: **Yes** and **No**
5. Click **Yes** to confirm the operation to remove the Deployment

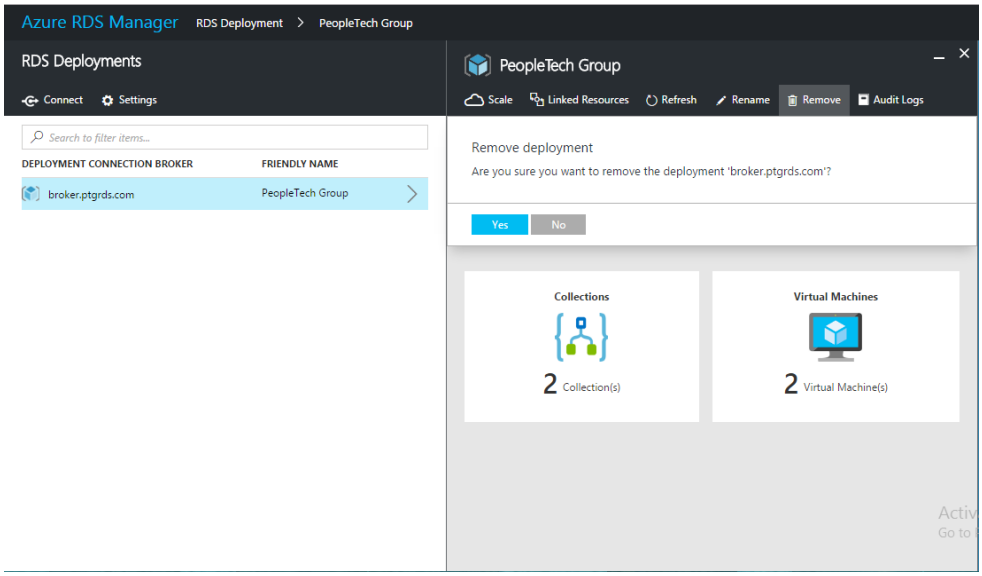


Figure 5. Deployment remove confirmation dialogue box

Scale an Existing Deployment

Azure RDS Manager provides an option to automatically scale your Deployment. Scaling your Deployment means to automatically turn on/off the Session Host Servers holding the collections that exist under your Deployment.

Use the following steps to scale a Deployment:

1. Click on the desired Deployment from the list of deployments shown in the deployments blade
2. A new blade will open containing options to manage your selected deployment
3. Click **Scale**
4. A new blade will open containing a **Scale status** button with **On** and **Off** status and four greyed out text fields: **Azure Username**, **Password**, **Azure-Subscription Name**, and **Resource Group Name**

   Note: The text fields will be empty the first time you scale the deployment. Text fields will be enabled when you toggle **Scale status** to **On**

   - In **Scale status**, click **On**
5. Fill in all the fields then click **Save**

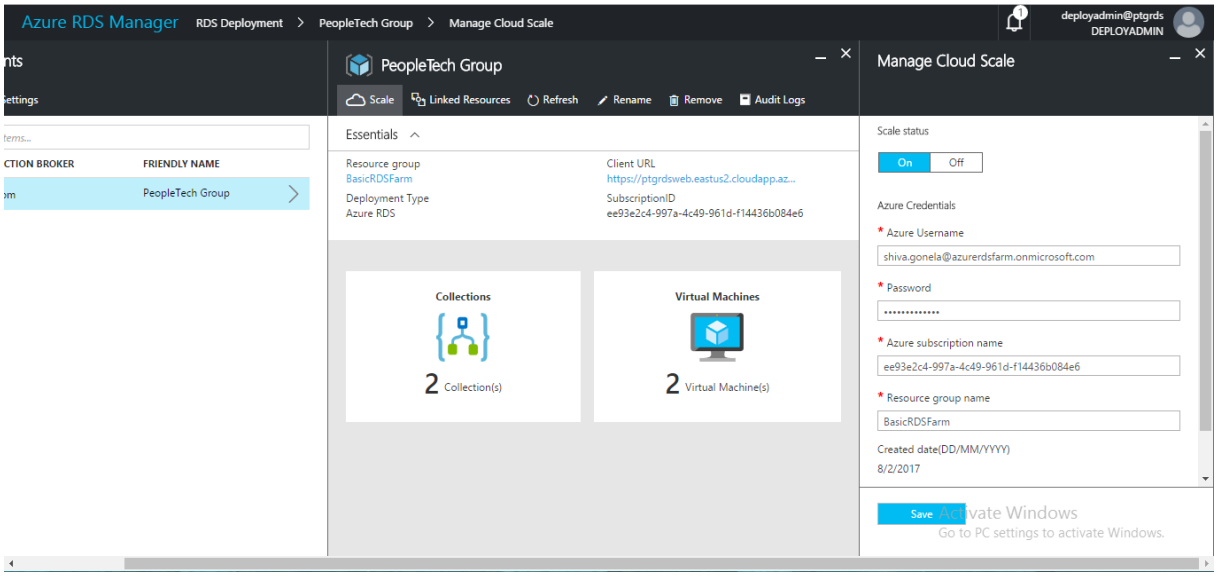


Figure 6. Scaling an existing Deployment

List the Linked Resources

Server pre-requisites to setting up the RDS Manager environment:

1. Connection Broker Server
2. Web Gateway Server
3. Web Access Server
4. RD Licensing Server
5. Active Directory Domain Controller

The RDS Manager environment runs on top of these servers. Additionally, there are many session host servers where the sessions are hosted and managed efficiently. The above-referenced servers along with the session host servers are called linked resources. To get the list of linked resources for your deployment, click Linked Resources in the selected deployment blade

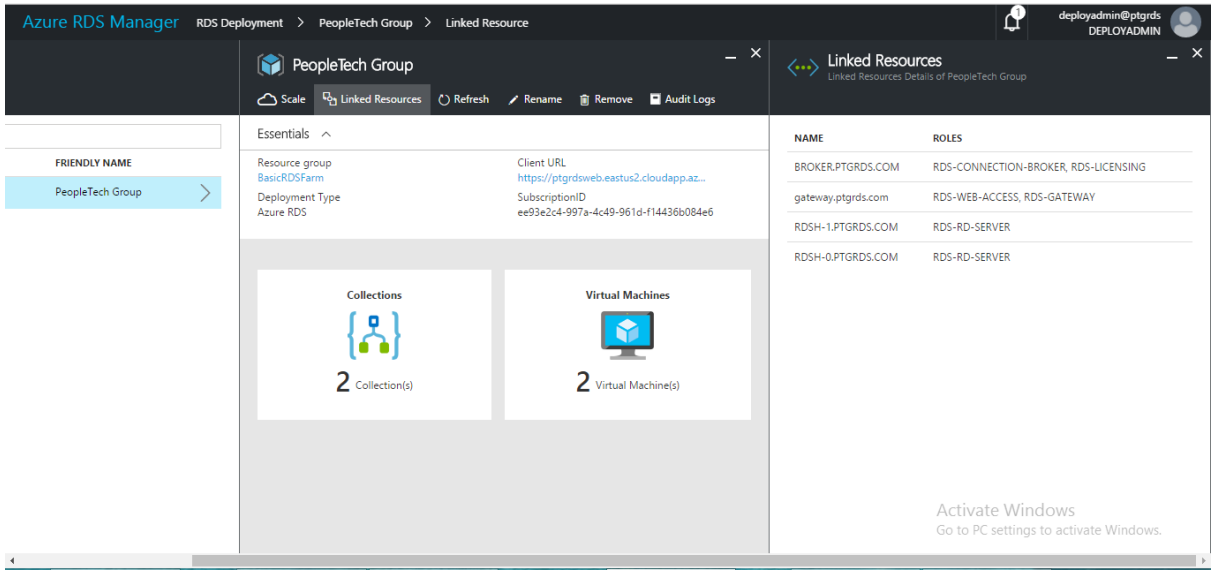


Figure 7. Blade showing all the linked resources associated with your Deployment

View Audit Logs

The RDS Manager Application provides you with Audit Logs that keep track of all actions that failed beginning from Connecting to a New Deployment. Audit Logs create an xml file with the details of failed actions. Failed actions on the same date can be made into a single file by appending one below the other. Failed actions on different dates have different files with the dates as file names.

Use the following steps to check audit logs:

1. On the **Deployments** blade, click **Settings**
2. A new blade will open with two options **Database Configuration** and **Audit Logs**
3. Click **Audit Logs**
4. A new blade will open with a list of dates when error logs were created
5. Click the row of a desired date to see audit log details for that date

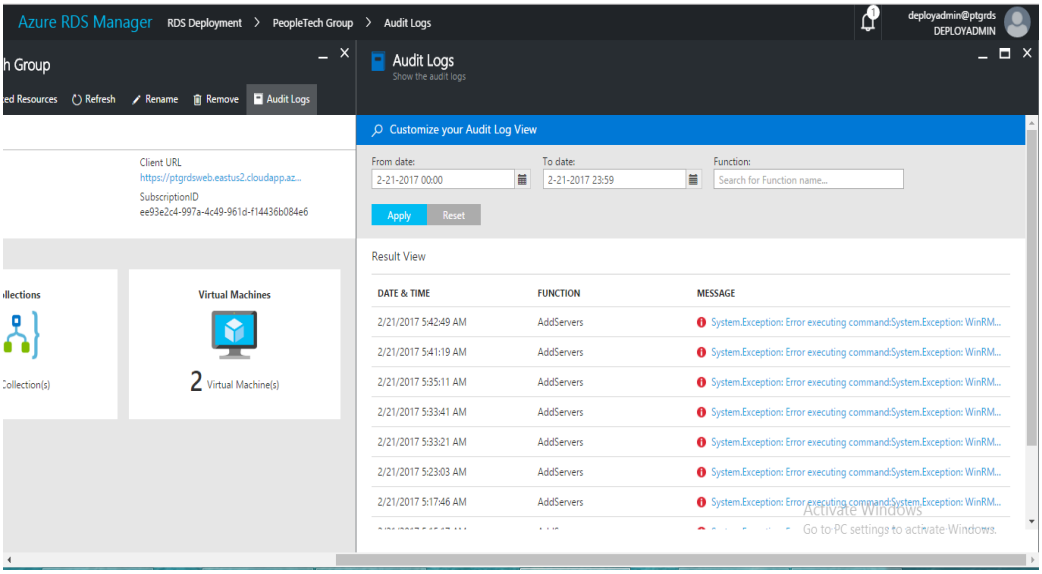


Figure 8. Blade showing the Audit Logs information

Maintain Database Configuration

RDS Manager provides a feature that stores sensitive information in tables and then stores them in a database.

Steps to configure your database:

1. Click **Settings** on the **Deployments** blade
2. A new blade will open containing your database configuration details like Server Name, Database Name, Username & Password
3. Specify the required details, then click **Save**
4. A database with the specified Database Name will be created on the Server
5. The Username and Password will be used to connect to the database using Windows Authentication

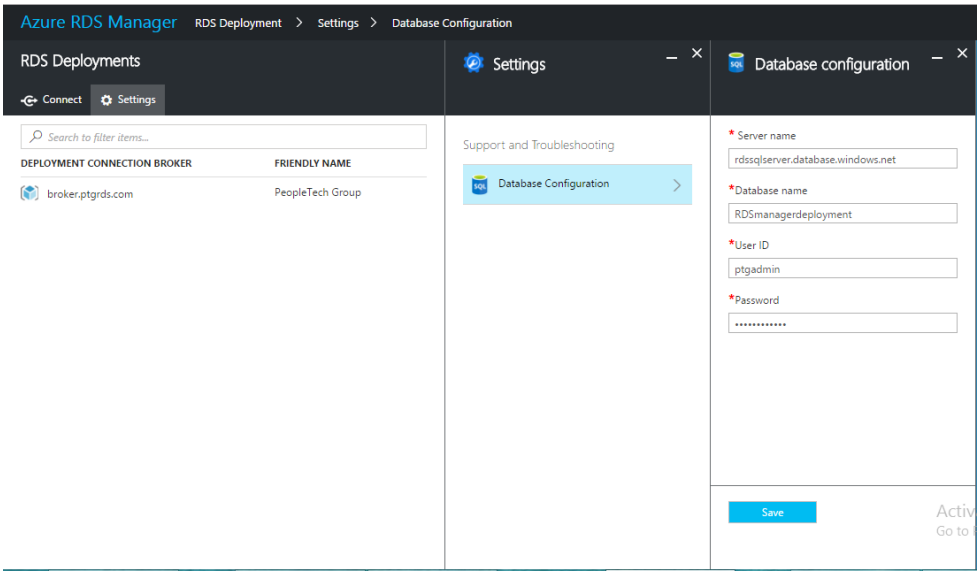


Figure 9. Database Configuration details blade

RD Virtual Machines

In order to create a collection, we need a virtual space assigned to that collection. These servers are Virtual Machines.

How to Manage RD VM's

RDS Manager provides a feature to efficiently manage the VM's that are allocated to your deployment.

Adding a Virtual Machine:

Use the following steps to add a RD VM to the existing VM's

1. Click the **Virtual machines** tile in the **Deployments** blade
2. A new blade will open with options to manage your VM's
3. Click **Add**
4. A new blade will open with one text box: **Server name**
5. Specify the name of the server being added, then click **Add RD Server**
6. The new RD Server will be added to the existing Servers

Note: You can add any number of Virtual Machines to the RDS manager environment. The free servers are assigned the role **FREE-RD-SERVER**. Only servers that are added to the RDS Environment can be added as a Virtual Machine. Once you add a Virtual machine, its role will change to **RD-RDS-SERVER** and it can be assigned a collection.

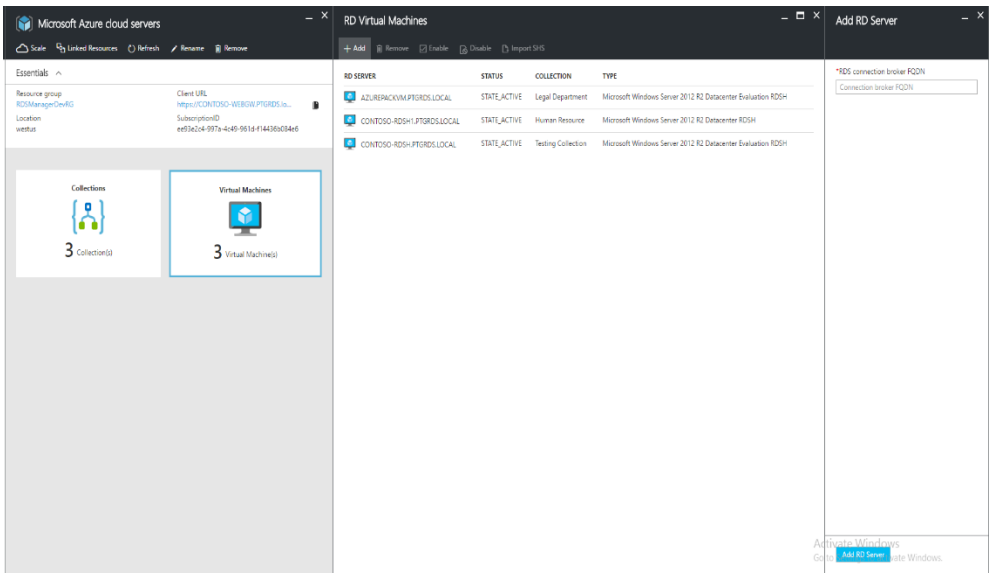


Figure 8. Adding a Virtual Machine

Remove a Virtual Machine:

Use the following steps to remove a RD VM from the existing VM's.

1. Select the Virtual Machine you want to delete
2. Click **Remove**

Note: The state of the Server is important. If the server has been assigned to a collection, you won't be able to remove the server. If the state of the server is **STATE-UNASSIGNED** then you will be able to delete the server.

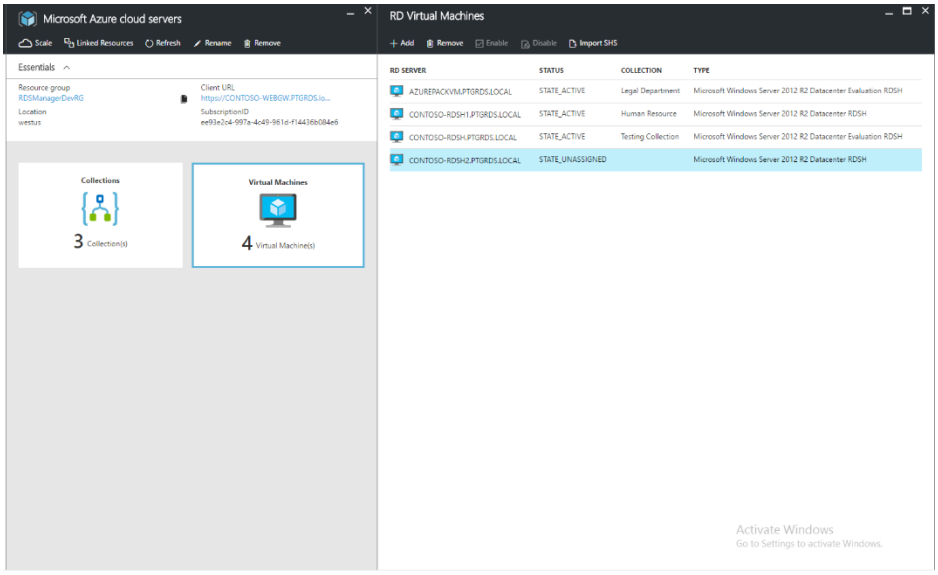


Figure 9. Removing a Virtual Machine

Enable a Virtual Machine

Use the following steps to enable a Virtual Machine.

1. Click the name of the Virtual Machine you want to enable
2. Click **Enable** from the options

Note: The state of the server must be **STATE-DRAIN** in order to enable. Once enabled, the server state will change to **STATE-ACTIVE**. **STATE-DRAIN** implies that the server has been added to a collection but is not in an active mode.

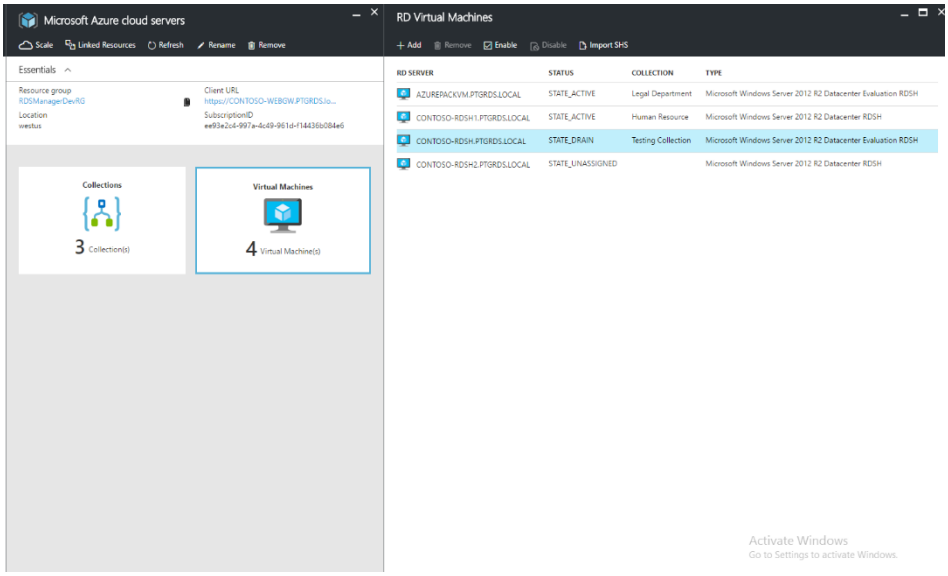


Figure 10. Enabling a Virtual Machine

Disable a Virtual Machine

Use the following steps to disable a Virtual Machine.

1. Select the Virtual Machine you want to Disable
2. Click **Disable** from the options

Note: The state of the server must be **STATE-ACTIVE** to disable it. Once you disable the server, its state will be changed to **STATE-DRAIN. STATE-DRAIN** implies that the server has been added to a collection but is not in active mode.

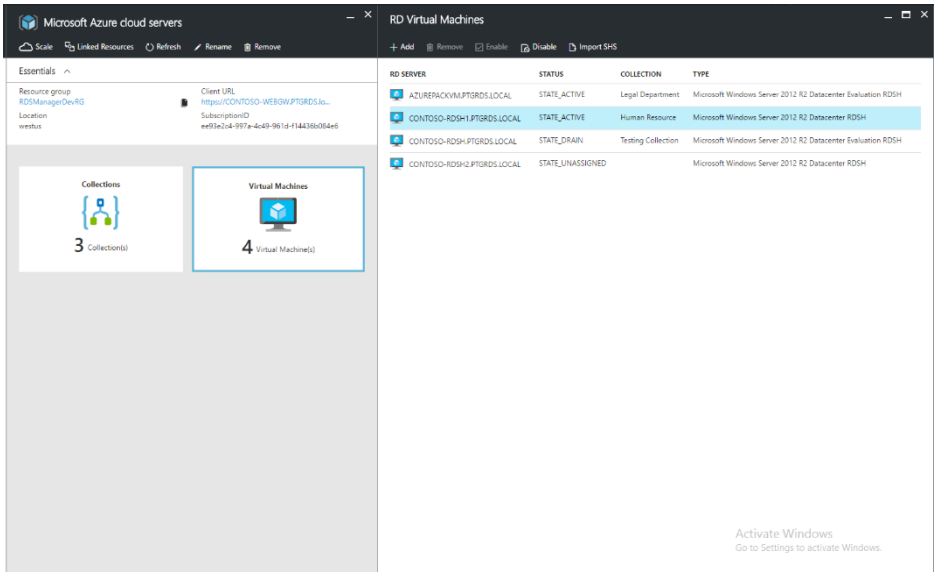


Figure 11. Disable VM

Importing Session Host Servers

Use the following steps to import Session Host Servers.

1. Select **Import SHS** from the options available
2. A new blade will open with a **Choose file** option to specify a csv file
3. Specify the csv file that has the list of servers you want to add
4. Once specified, the servers that are existing in the file will be displayed below
5. You will see two buttons: **Create All** and **Create Selected**
6. Click the desired server from the list, and then click **Create Selected** to add selected servers or click **Create All** to directly add all the servers in the list

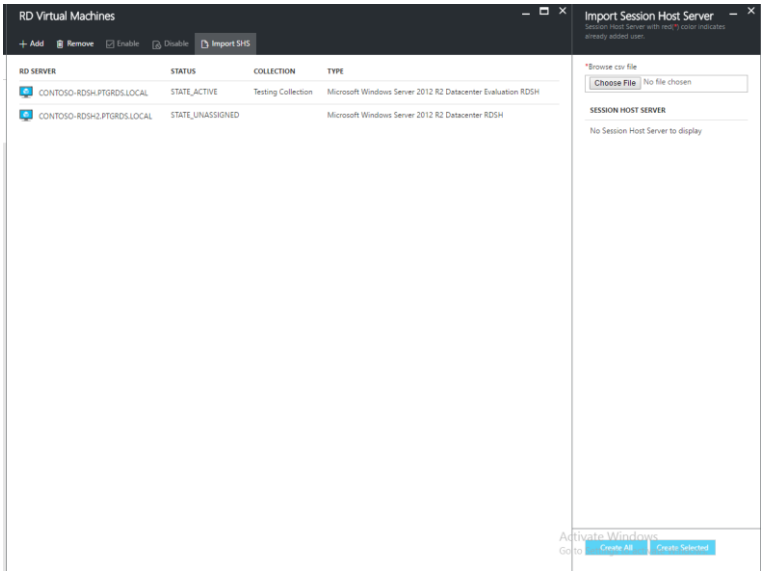


Figure 12. Importing Session Host Servers

Monitoring

Azure RDS Manager monitors the diagnostic data of a RD SHS. Diagnostic data includes

- Number of Active Sessions
- CPU utilization
- Disk Read & Write in bytes
- Network In and Out in bytes

Admins can monitor/view the collected data in a customized graphical format

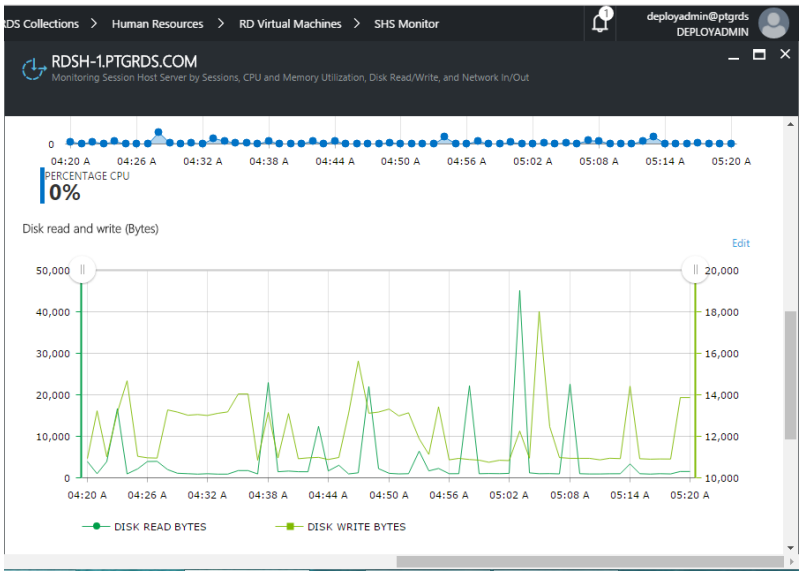


Figure 13. Data Monitoring

Manage Collections

RDS Collection is a group of RD Session Host servers with a shared set of RemoteApps in which session hosts can be published to users. A collection can contain either remote desktops or RemoteApps, but not both.

RDS Manager application portal allows you to add RDS Collections. The first blade of the Dashboard page lists the existing collections in the account. A CollectionAdmin can manage the collections by following some simple steps.

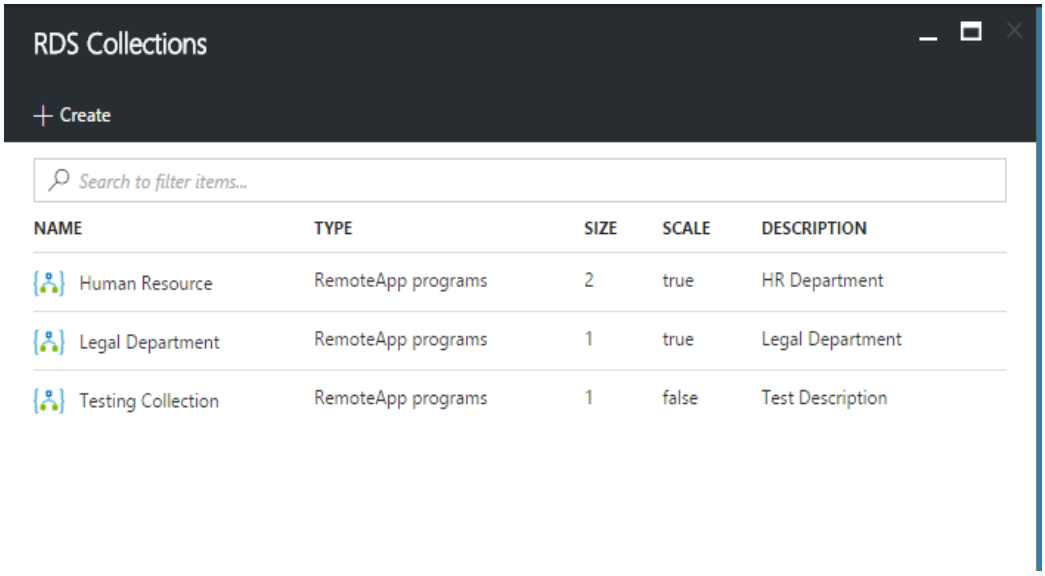


Figure 14. List of Connected Collections

Create a New Collection

Use the following steps to create a new collection.

1. Click **Create** on the RDS Collections blade. It will open a blade with five required fields.
   - Subscription
   - Name
   - Description
   - Virtual Machines
   - User(s)

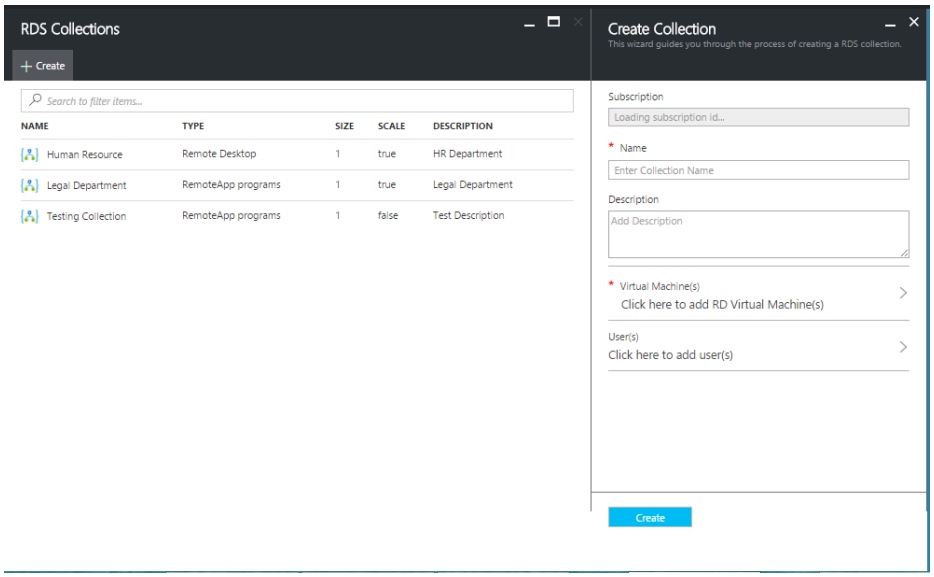


Figure 15. Create new Collections

1. **Subscription** is disabled by default. The Subscription ID will be loaded dynamically
2. **Name**: The name of your collection
3. **Description:** Additional information about the collection
4. **Virtual Machines:** Select the Virtual Machine from the list to assign it to a collection, choose a machine then click **Add**
5. **User(s):** Add the list of users. Note: Only those users will be able to access the collection

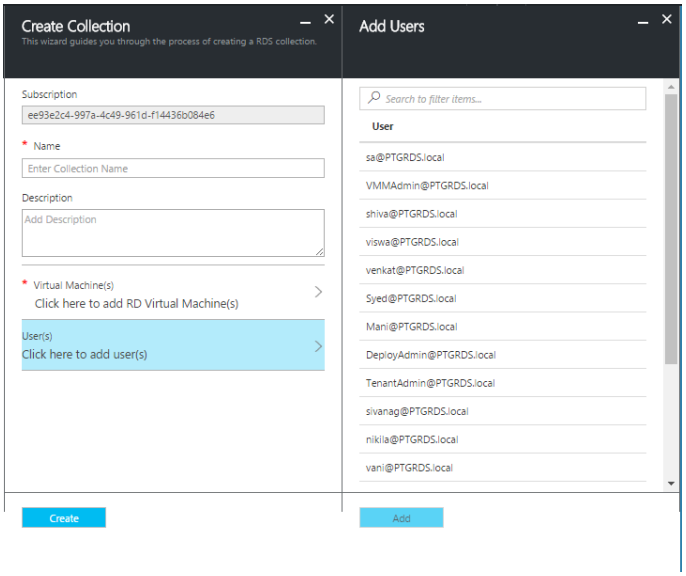


Figure 16. Add user in Collections

Collection Settings

1. Click **Settings** on the **Dashboard**. A **New Settings** blade will open. This contains following four fields
    - Scale
    - Collection Settings
    - Client Settings
    - User Profile Disks

Figure 17. Collections Settings

2. When multiple VMs run in a particular time period, it is called Scale. Scale status allows the Collection Admin to manage multiple VMs according to their usage. Scale settings can be turned **On** or **Off**
3. **Scale**: There are five fields. **Start time**, **End time**, **Logoff Wait** (time to wait for the user to save work and log off the session), **Session Threshold per CPU** (the number of sessions allowed on a CPU core), and **Minimum Server Count** (the number of Session host servers at peak and off-peak times)
4. **Collection Settings**: Configure collection level sessions behavior. Collection settings have session timeout related options
5. **Client Settings**: Restricts users on redirection of audio and video play back, audio recording, smart cards, plug & play devices, drives and printers

6. **Use Profile Disk**: Store user data and apps (a user profile) as a separate disk in a dedicated place. The disk follows the user and ensures the user has a consistent experience, regardless of where they sign in

Delete a Collection

1. Click **Delete** on the **Dashboard**. A confirmation pop-up will launch with the selected **Collection** name. Click **YES** to delete collection

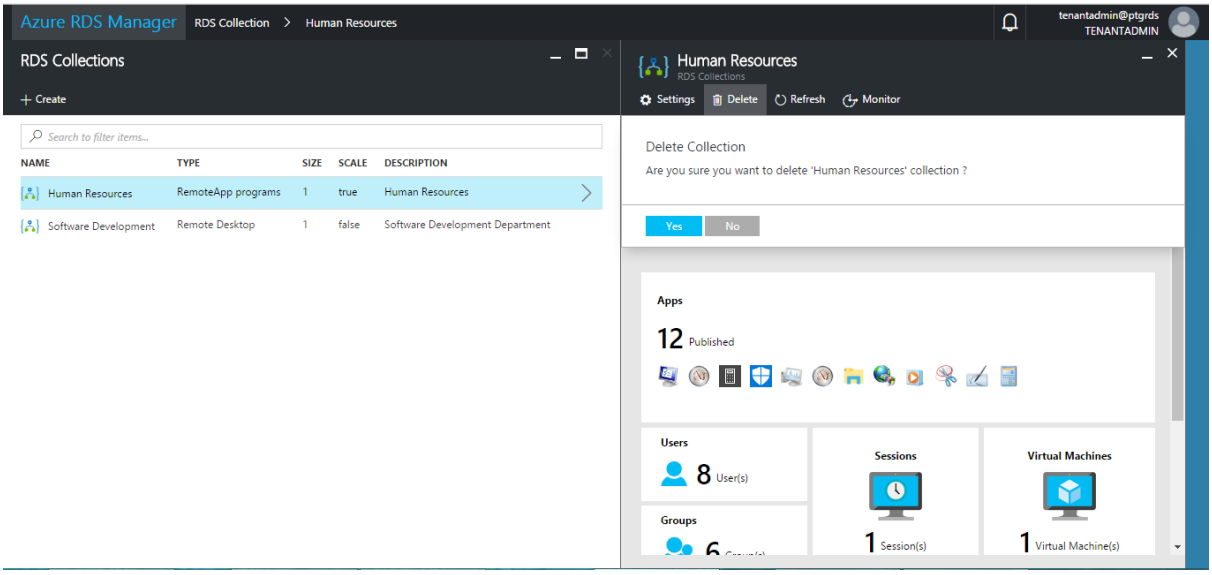


Figure 18. Delete Collections

Monitor Collection

Monitor Collection is a feature provided by RDS Manager. The CollectionAdmin can get an overview on the number of active Sessions, CPU utilization, Disk Read & Write in bytes, and Network In and Out in bytes of a SHS at a certain time. Monitor option provides a graphical format of collected diagnostic data.

Data are monitored on a Collection level as well as the SHS level.

After clicking on the desired collection, a **Dashboard** blade will open with the **Monitor** option.

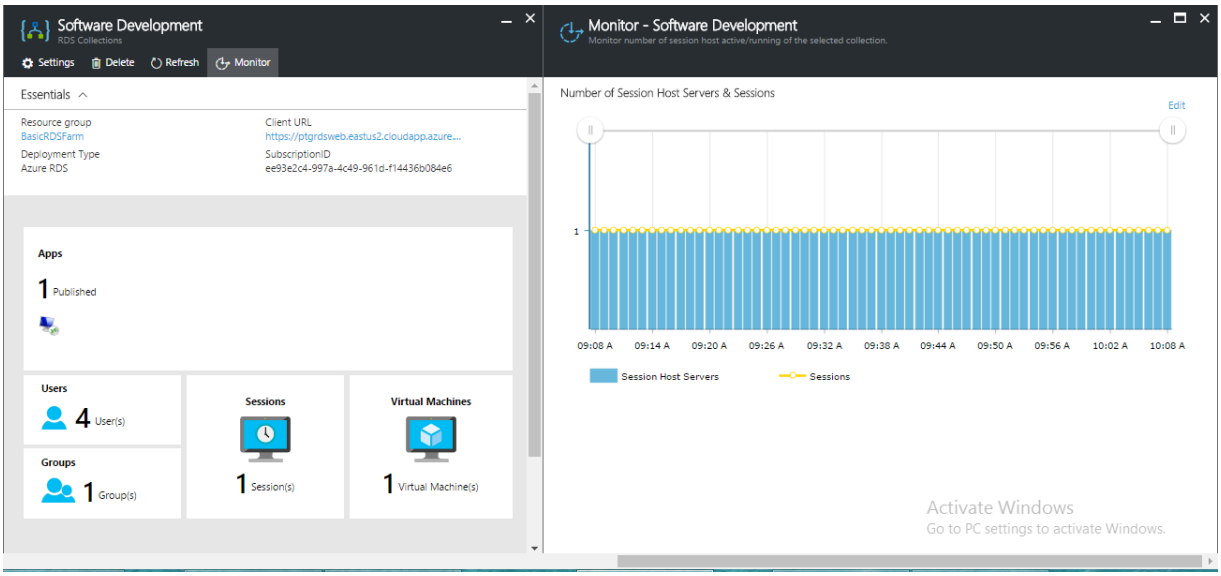


Figure 19. Monitor Collections

1. In the **Monitor** blade, and **Edit** option is available where the user can select the **Time Range** For example, the Past Hour, Last week, Today, or Custom

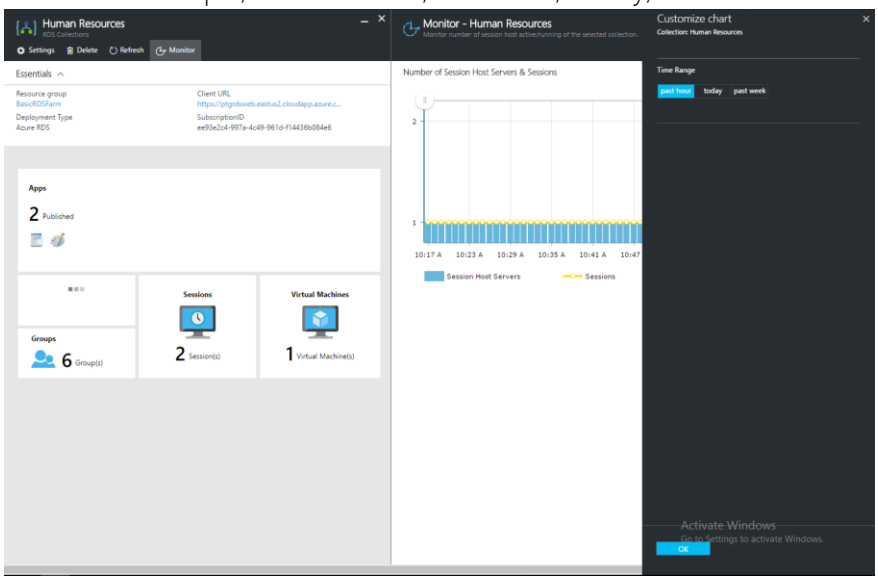


Figure 20. Monitor Collections Edit

Manage Applications

Click **Apps.** A new blade will open with a list of all published apps in the collection.

The RDS Manager application portal allows you to efficiently manage your applications in two ways.

1. Publish
2. Publish Path

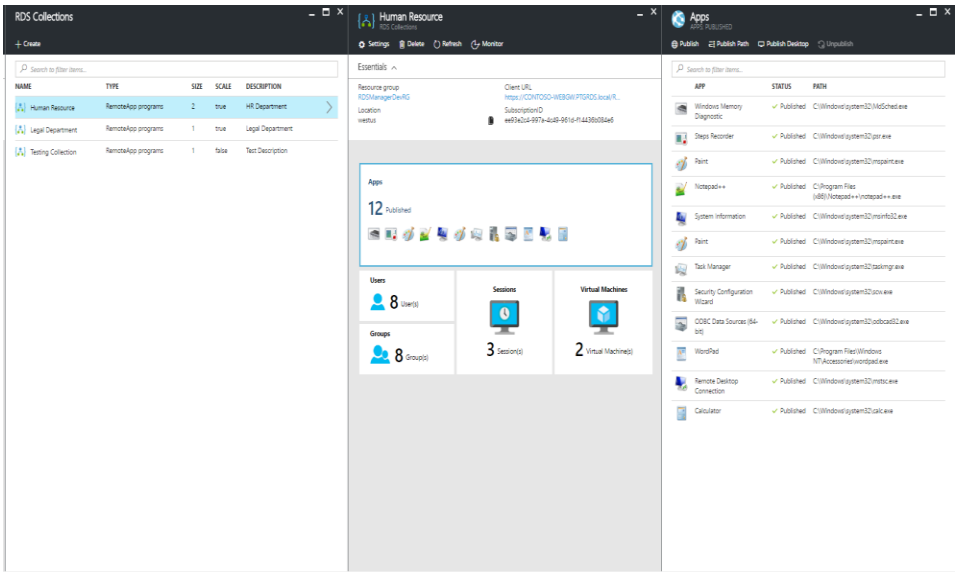


Figure 21. List of Applications in your collection

Publish an App

1. Click **Publish** on the **Apps** blade. It will launch the **Publish Start Menu Programs** blade that lists the apps that are present in the RDS Manager Server
2. It is possible to publish multiple apps from a list of available Start Menu apps
3. Select the **App** you want to publish, then click **OK**
4. An alert saying your app was published successfully will pop up, and the selected App will be added to the Apps list in the blade

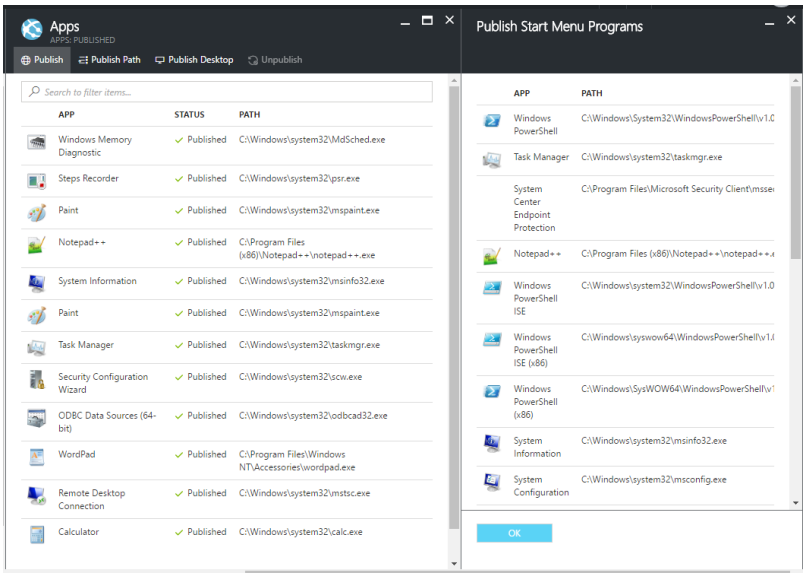


Figure 22. List of Applications to publish

Publish an App - Alternate Method

1. Click **Publish Path** on the **Apps** blade. It will launch a **Publish using path** blade with two fields.
    a. **App Name** - Name of the app that you want to publish
    b. **App Path** - Location where you want to publish the app
2. Specify the **App Name** and **App Path**, then click **OK**
3. An alert pops up to confirm that your app was published successfully to the selected path, and the App is added to the **Apps** list in the blade

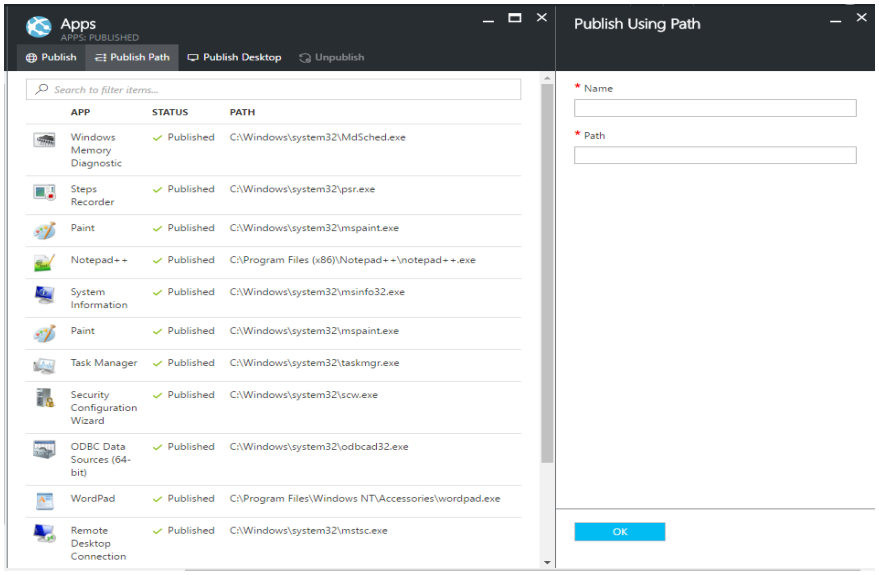


Figure 23 Publish an App

Publish Desktop

The Publish Desktop operation results in all apps being unpublished, and it converts the RemoteApp collection to a Remote Desktop collection.

1. Click **Publish Desktop.** The collection of apps which are assigned to the RDS collection of the Virtual Machine will be unpublished
2. After publishing the app, a success popup will be displayed

Un-Publish App

1. Unpublish the app you want to remove from a collection
2. Click an application name on the list of applications, and click **Unpublish**
3. The specified application will be removed from the collection

Users

The RDS Manager Application allows you to efficiently manage the users that are assigned to a collection.

1. Click **Users**. A new blade will open and a list of users assigned to the selected collection will be displayed

Add Users to the Collection

Click **Add** in the **Users** blade

1. A new blade will open with a list of users existing in the domain
2. It is possible to select multiple users from the list of available users
3. After selecting the desired user or users, click **Add**
4. The selected user or users will be added to the collection

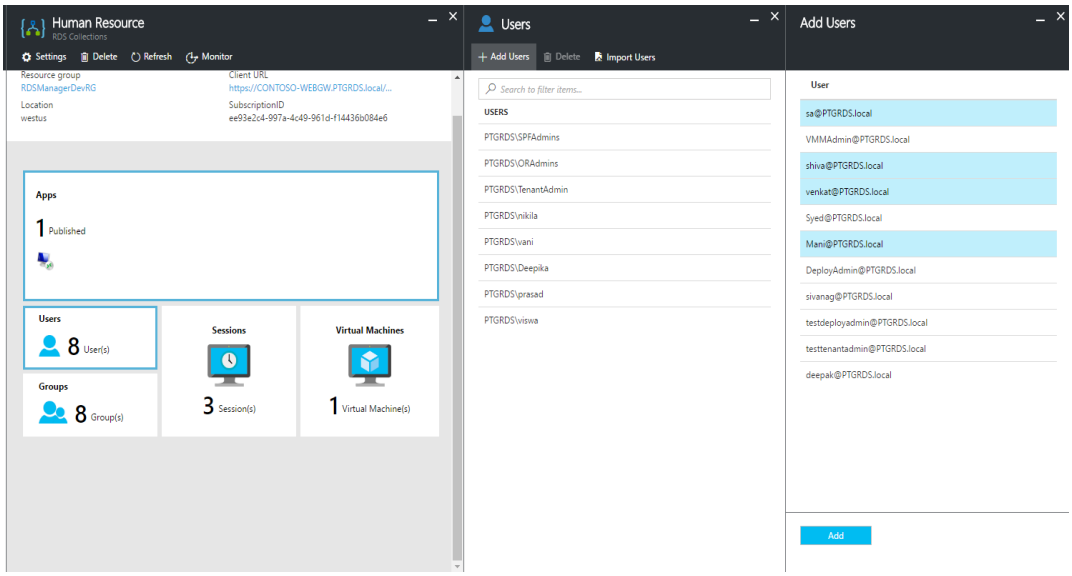


Figure 24. Blade showing list of Users to be added to collection

Deleting Users

Use the following steps to delete users that are already assigned to the collection.

1. Click **Delete** from the list of options
2. A confirmation dialog box will open with two options: **Yes** and **No**
3. To delete the specified user, click **Yes**

Note: Multiple users cannot be deleted at the same time

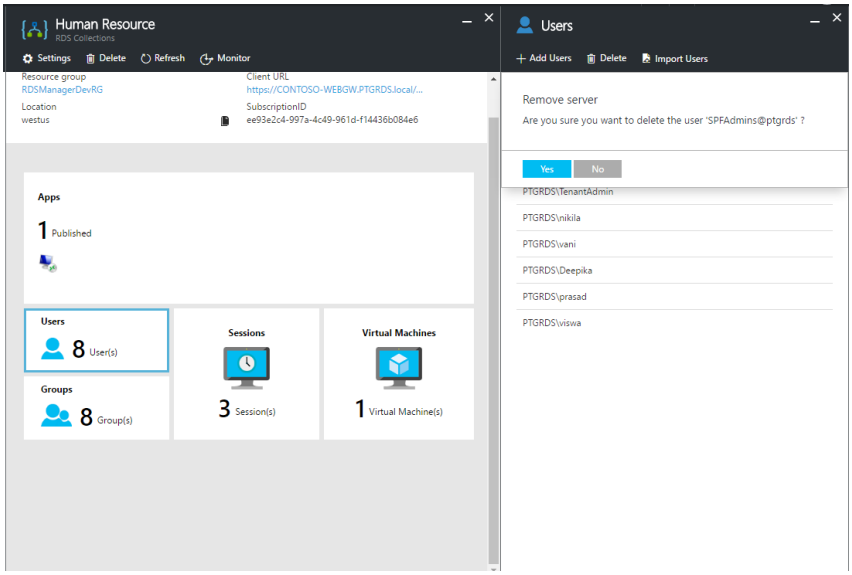


Figure 25. Removing User

Importing Users from a CSV File

Use the following steps to import bulk users at one time from a CSV file.

1. Click **Import Users** from the list of options
2. A new blade will open with a **Choose file** option
3. Specifiy the desired CSV file. The users in the CSV file will be displayed as a list below the file selection control
4. To add all the users at the same time, click **Add All Users**, or only selected users by clicking **Add Selected Users**
5. Specified users will be added to the selected collection

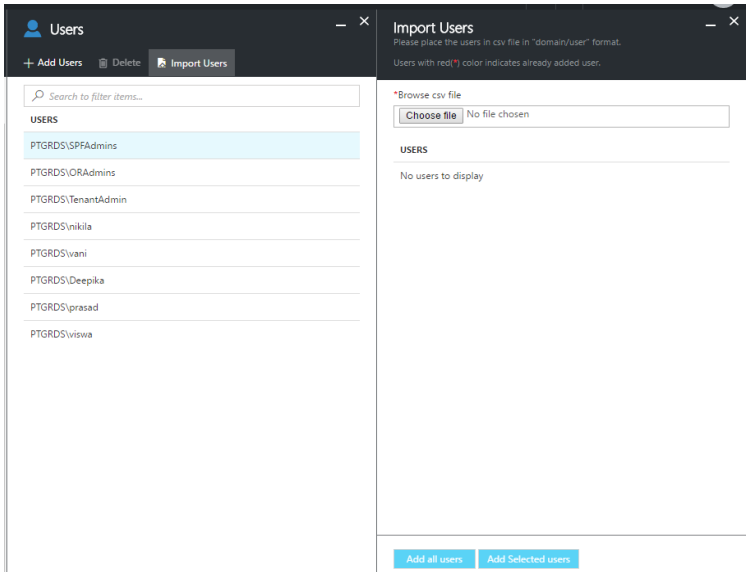


Figure 26. Import User

Groups

Groups is one of the tiles on the Dashboard. It contains a list of the **User groups**. The CollectionAdmin can **Add** or **Import** new **User groups** or **Delete** a group

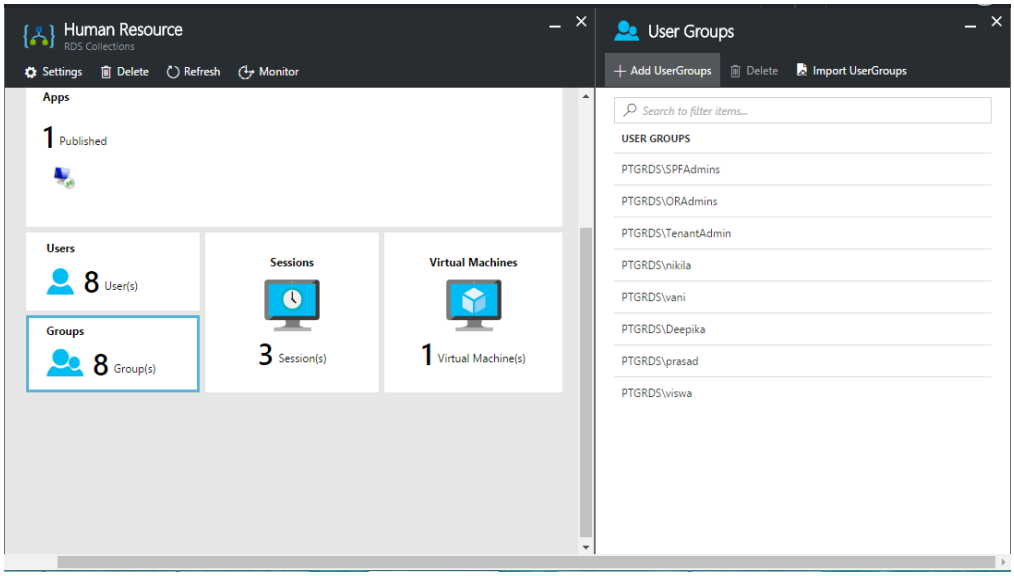


Figure 27. Groups

1. **Add User Group:** Opens a new blade with the user's groups. Select one of the groups, then click **Show Users in Group** to display the list in a new blade

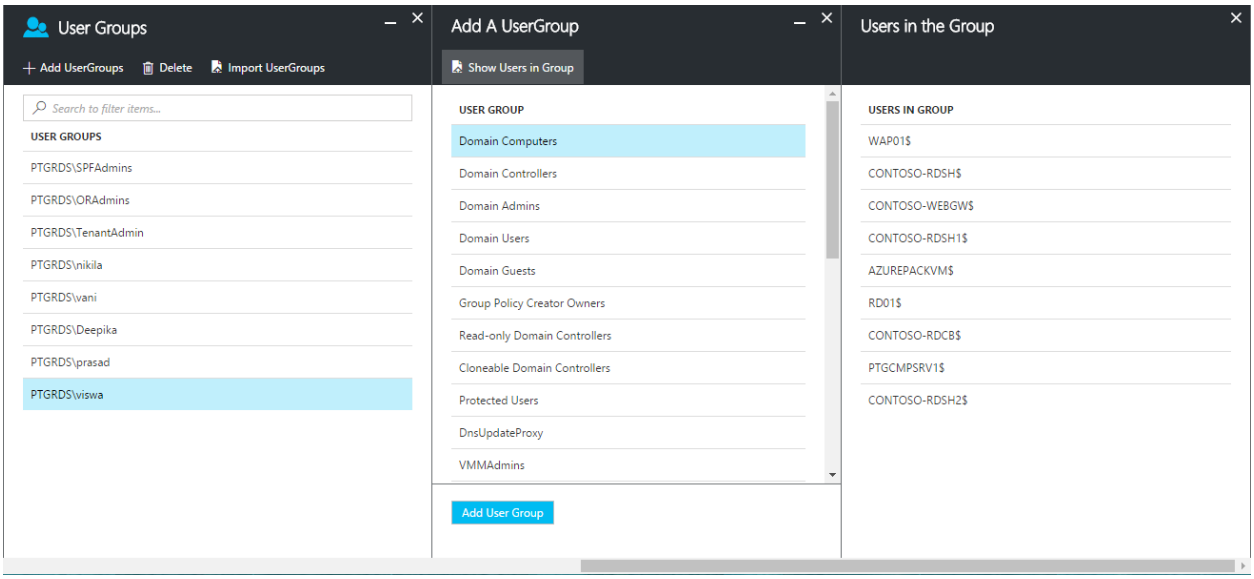


Figure 28. Show Users in Groups

2. **Import Users:** Add a new group from the user's system. The file must be in .csv format

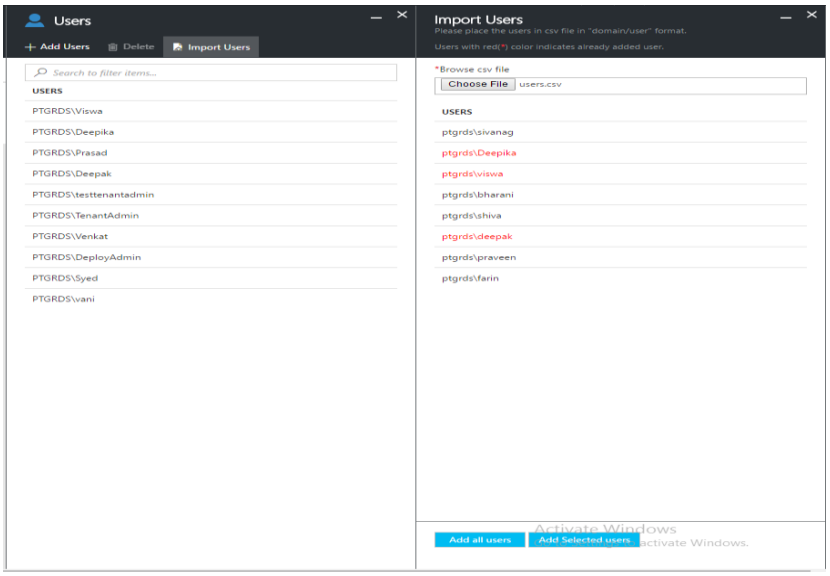


Figure 29. Import User Groups

Sessions

When a user logs into the RDS Manager, a session will be created in the session host server. RDS Manager allows you to efficiently manage the sessions that are currently running in the host server.

Use the following steps to display session details.

1. Click **Sessions** to open a new blade with session infromation
2. Session detail include:
    - User Name : Name of the logged in User
    - Session State : Status of the session
    - Logon time : Time when the connection was established
    - Host Server : Server where the session is running
    - Idle time : Idle time in minutes

Sending a Message to a Connected User

Use the following steps to send a message to a session and to the user connected to the session.

1. Click **Sessions**
2. A new blade will open with a list of options related to the sessions
3. Click on the desired session, and then click **Messages**
4. A new blade will open with a drop down containing two options: **Administrator** and **All available Users** as well as **Title** of the message and **Content** of the message
5. You can send a message to the administrator by selecting the **Administrator** option, or send a message to all available users by selecting **All Available Users**
6. Type the title of the message and the content of the message, then click **Send Message**. The message will be sent to the admin or the available user, based on the option you chose

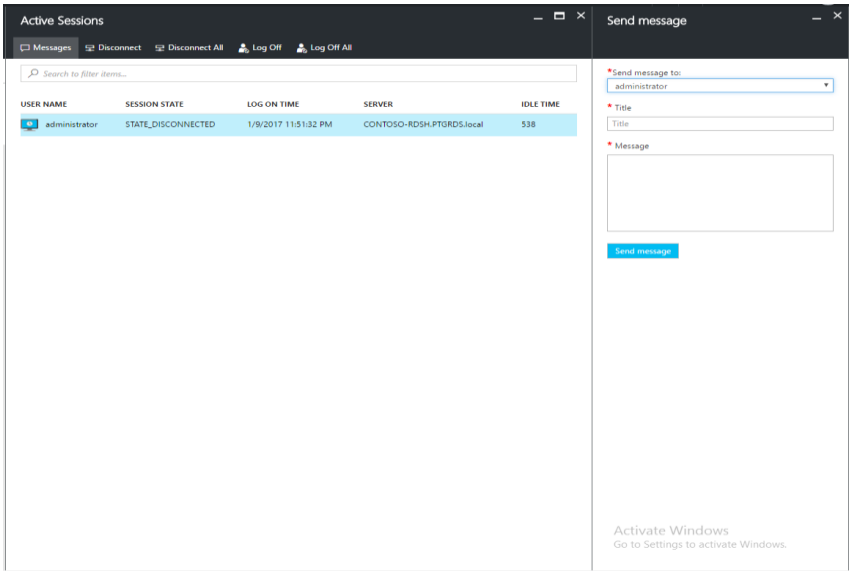


Figure 30. Send Message

Disconnect Selected Session

Use the following steps to disconnect the selected session.

1. Specify the session you want to disconnect
2. Click **Disconnect**
3. The session will be disconnected from the host server

Disconnect All Sessions

To disconnect all the available sessions at the same time, you can select **Disconnect All**. All the sessions that are currently running on the session host servers will be disconnected.

Logoff Selected Session

Use the following steps to logoff the selected session.

1. Specify the session you want to logoff
2. Click **Logoff**
3. The session will be logged off from the session host server

Logoff All Sessions

To logoff all the available sessions at the same time, select **Logoff All**. All sessions that are currently running in the session host servers will be logged off.

Virtual Machines

Note: All the functionalities for Virtual Machines remain the same as discussed in the earlier pages of this documentation except the **Message** option.

Sending messages to VM Users:

Use the following steps to send a message to a VM and to the user connected to the session.

1. Click **Virtual Machines**
2. A new blade will open with a list of options related to VM sessions
3. Click the desired VM, then click **Messages**
4. A new blade will open with a dropdown with two options: **Name of the VM** and **All available servers** as well as **Title** of the message and **Content** of the message
5. You can send a message to the current VM by selecting **Name of the VM,** or send a message to all the available VMs by selecting **All Available Servers**
6. Fill in the title of the message and content of the message then click **Send Message**. The message will be sent to the VM or the available VM based on the option you chose

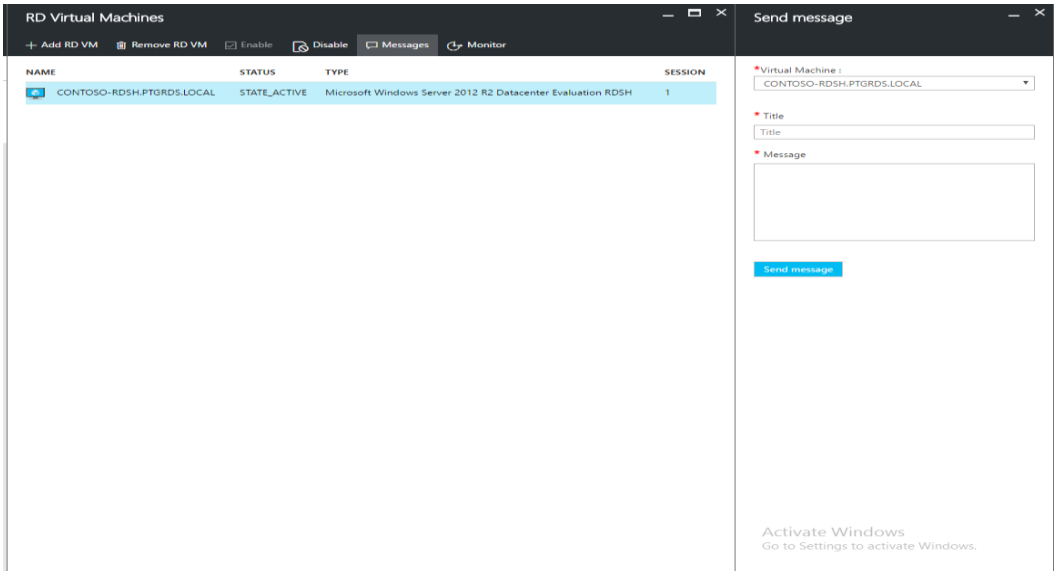


Figure 31. Send Message RD VM

Monitor Collection Edit

In the **Monitor** blade, the **Edit** option is available where you can select the 'Time Range' – for example, Past Hour, Last week, Today, or Custom. There are also different types of charts for more clarity on utilization of a particular collection.

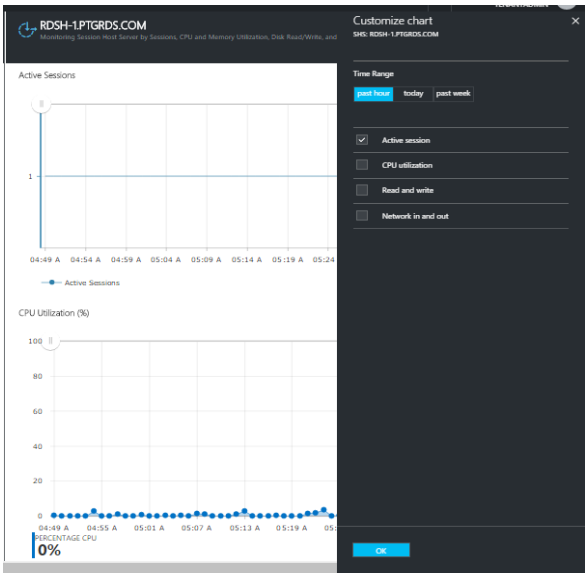


Figure 34. Monitor Collections Edit