BlackBerry Device Service

Administration Guide

Version: 6.0

:: BlackBerry®

Contents

Related resources

To read the following guides, visit www.blackberry.com/go/serverdocs.

Resource	Description
BlackBerry Bridge App and Tablet Security Technical Overview	• Description of how work data is protected on a tablet when you use the BlackBerry Bridge app • Description of how work data is protected when it is in transit between a tablet and a BlackBerry smartphone • Description of attacks that the BlackBerry Bridge pairing process is designed to prevent
BlackBerry Device Service Help	• Instructions for creating user accounts, groups, roles, administrator accounts, and so on • Instructions for activating tablets • Instructions for creating and sending IT policies and profiles • Instructions for sending and managing applications on tablets
BlackBerry Device Service and BlackBerry Mobile Fusion Studio Installation and Configuration Guide	• System requirements • Installation instructions • Instructions to add or remove MDM domains from BlackBerry Mobile Fusion Studio
BlackBerry Device Service and BlackBerry PlayBook Tablet Security Technical Overview	• Description of the security maintained by the BlackBerry Device Service, BlackBerry Infrastructure, and tablets to protect data and connections • Description of the BlackBerry Tablet OS • Description of how work data is protected on tablets when you use the BlackBerry Device Service
BlackBerry Device Service Feature and Technical Overview	• Architecture diagrams • Description of features and components • Data flows

Resource	Description
BlackBerry Device Service Policy Reference Guide	• Descriptions of available IT policy rules and profile settings
BlackBerry Device Service Release Notes	• Description of known issues and potential workarounds
BlackBerry PlayBook Tablet Print To Go Security Note	• Description of how data is protected when using Print To Go • Instructions for preventing the use of Print To Go
BlackBerry Web Desktop Manager User Guide	• User instructions for activating tablets • User instructions for protecting a lost tablet

About the BlackBerry Device Service

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The BlackBerry Device Service permits you to manage the work perimeter on BlackBerry PlayBook tablets that run BlackBerry Tablet OS 2.0 or later.

The BlackBerry Device Service allows you to:

- control the connections the tablet makes to your organization's environment, including connections to your organization's Wi-Fi networks and Microsoft ActiveSync
- install and manage your organization's applications on tablets
- protect your organization's data and applications on tablets

You can install the BlackBerry Device Service with the BlackBerry Mobile Fusion Studio. The BlackBerry Mobile Fusion Studio provides a simplified administrative console for your organization's helpdesk administrators.

You can download the BlackBerry Device Service from www.blackberry.com/support/downloads.

Log in to the BlackBerry Administration Service

To open the BlackBerry Administration Service, you can use a browser on a computer that has access to the computer that hosts the BlackBerry Device Service. You can set an administrator account to use Microsoft Active Directory or BlackBerry Administration Service credentials to log in to the BlackBerry Administration Service.

When you install the BlackBerry Device Service, you specify the credentials that you use to log in to the BlackBerry Administration Service for the first time.

1. In the browser, type **https://<*server_name*>/webconsole/login,** where <*server_name*> is the name of the computer that hosts the BlackBerry Administration Service.
2. In the **User name** field, type your user name.
3. In the **Password** field, type your password.
4. Perform one of the following actions:

    - In the **Log in using** drop-down list, click **BlackBerry Administration Service**.
    - In the **Log in using** drop-down list, click **Active Directory** and type the Microsoft Active Directory domain in the **Domain** field.
5. Click **Log in**.
6. Install the RIMWebComponents.cab add-on if you are prompted to do so.

Related information

Managing user accounts

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User accounts represent BlackBerry PlayBook tablet users in your organization. You can manage user accounts in the BlackBerry Administration Service to control the functionality of BlackBerry PlayBook tablets.

Create a user account

Before you begin:

Verify that the user account exists in your organization's user directory.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Create a user**.
3. Search for a user account.
4. Select the check box beside the display name for the user account.
5. Click **Continue**.
6. To add the user account to a group, in the **Available groups** list, select a group and click **Add**.
7. Click **Create a user**.

After you finish:

Change the user account to configure the user account properties.

Change a user account

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, click the display name for the user account.
5. Click **Edit user**.
6. Make the changes on the appropriate tabs.
7. Click **Save all**.

Create user accounts from a .csv file

Before you begin:

Export user accounts from the BlackBerry Administration Service.

Verify that the user account exists in your organization's user directory.

You can create a list of user accounts by importing information about the user accounts from a .csv file.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Create a user**.
3. Click **Import new users**.
4. Click **Browse**.
5. Navigate to the .csv file and click **Open**.
6. Click **Continue**.
7. In the **Available groups** pane, select the groups for the user accounts.
8. In the **Email profiles** pane, select the email profile for the user accounts.
9. Click **Create a user**.

Change the user accounts in a .csv file

You can change all of the user accounts that you import from a .csv file. TheBlackBerry Administration Service selects all of the user accounts in the .csv file automatically so that you do not need to manually search for and select each user account.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Click **Manage multiple users from an import list**.
4. Click **Browse**.
5. Navigate to the .csv file and click **Open**.
6. Click **Next**.
7. Select the user accounts that you want to change and make the appropriate changes.
8. Click **Save all**.

Delete a user account

Before you begin:

Disable the user account as a BlackBerry PlayBook tablet user.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, click the display name of the user account.
5. In the **Status** list, click **Delete user**.
6. Click **Yes - Delete this user**.

Add user accounts to groups

When you add a user account to a group, the user account inherits the roles, software configurations, IT policies, and profile settings of the group.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for the user account.
4. In the search results, select the check box for the user account.
5. Click **Add group**.
6. Perform one of the following actions:

    - To add the user account to one group, select the group and click **Add**.
    - To add the user account to more than one group, select multiple groups and click **Add**.
    - To add the user account to all of the groups, click **Add all**.
7. Click **Save**.

Related information
Managing groups, 20

Delete user accounts from groups

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Remove group**.
6. Perform one of the following actions:

    - To delete the user account from one group, select the group and click **Remove**.
    - To delete the user account from more than one group, select multiple groups and click **Remove**.
    - To delete the user account from all of the groups, click **Remove all**.
7. Click **Save**.

Related information
Managing groups, 20

Add roles to user accounts

You can add roles to user accounts to allow users to view information and perform tasks in the BlackBerry Administration Service. When you add a role to a user account, the account becomes an administrator account.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Add role**.
6. Perform one of the following actions:

    - To add one role to the user account, select the role and click **Add**.
    - To add more than one role to the user account, select multiple roles and click **Add**.
    - To add all of the roles to the user account, click **Add all**.
7. Click **Save**.

Related information

Managing roles, 28

Delete roles from user accounts

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Remove role**.
6. Perform one of the following actions:

    - To delete one role from the user account, select the role and click **Remove**.
    - To delete more than one role from the user account, select multiple roles and click **Remove**.
    - To delete all of the roles from the user account, click **Remove all**.
7. Click **Save**.

Related information

Managing roles, 28

Add software configurations to user accounts

You can add a software configuration to a user account to control the software on a BlackBerry device.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Add software configuration**.
6. Perform one of the following actions:

   - To add one software configuration to the user account, select the software configuration and click **Add**.
   - To add more than one software configuration to the user account, select multiple software configurations and click **Add**.
   - To add all of the software configurations to the user account, click **Add all**.
7. Click **Save**.

Related information

Managing software configurations, 40

Delete software configurations from user accounts

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Remove software configuration**.
6. Perform one of the following actions:

   - To delete one software configuration from the user account, select the software configuration and click **Remove**.
   - To delete more than one software configuration from the user account, select multiple software configurations and click **Remove**.
   - To delete all of the software configurations from the user account, click **Remove all**.
7. Click **Save**.

Related information

Managing software configurations, 40

Add an IT policy to a user account

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Set IT policy**.
6. In the **IT policy** drop-down list, select the IT policy.
7. Click **Save**.

Related information

Managing IT policies, 42

Delete an IT policy from a user account

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Clear IT policy for user**.

Related information

Managing IT policies, 42

Add Wi-Fi profiles to user accounts

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Add Wi-Fi profile**.
6. Perform one of the following actions:

    - To add one Wi-Fi profile to the user account, select the Wi-Fi profile and click **Add**.
    - To add more than one Wi-Fi profile to the user account, select multiple Wi-Fi profiles and click **Add**.
    - To add all of the Wi-Fi profiles to the user account, click **Add all**.
7. Click **Save**.

Related information

Delete Wi-Fi profiles from user accounts

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click the **Remove Wi-Fi profile**.
6. Perform one of the following actions:

    - To delete one Wi-Fi profile from the user account, select the Wi-Fi profile and click **Remove**.
    - To delete more than one Wi-Fi profile from the user account, select multiple Wi-Fi profiles and click **Remove**.
    - To delete all of the Wi-Fi profiles from the user account, click **Remove all**.
7. Click **Save**.

Related information

Add VPN profiles to user accounts

1. In the BlackBerry Administration Service on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Add VPN profile**.
6. Perform one of the following actions:

    - To add one VPN profile to the user account, select the VPN profile and click **Add**.
    - To add more than one VPN profile to the user account, select multiple VPN profiles and click **Add**.
    - To add all of the VPN profiles to the user account, click **Add all**.
7. Click **Save**.

Related information

Delete VPN profiles from user accounts

1. In the BlackBerry Administration Service on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Remove VPN profile**.
6. Perform one of the following actions:

   - To delete one VPN profile from the user account, select the VPN profile and click **Remove**.
   - To delete more than one VPN profile from the user account, select multiple VPN profiles and click **Remove**.
   - To delete all of the VPN profiles from the user account, click **Remove all**.
7. Click **Save**.

Related information

Managing VPN profiles, 48

Add an email profile to a user account

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Set email profile**.
6. Select the email profile.
7. Click **Save**.

Related information

Managing email profiles, 49

Delete an email profile from a user account

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Clear email profile**.

Related information

Troubleshooting user accounts

You cannot create a user account

Possible cause

When you search for a user account to create the user account in the BlackBerry Administration Service, the BlackBerry Administration Service cannot find the user account. The BlackBerry Mail Store Service cannot connect to your organization's user directory.

Possible solution

1. Log in to the computer that hosts the BlackBerry Device Service using a Windows account that has administrator permissions on the computer.

2. On the taskbar, click **Start** > **All Programs** > **BlackBerry Mobile Fusion** > **BlackBerry Device Service**.

3. Right-click **BlackBerry Server Configuration** and click **Run as administrator**.

4. In the **BlackBerry Configuration Panel**, on the **LDAP Settings** tab, in the **Domain information** section, type the domain for your organization and click **Validate**.

5. In the **BlackBerry Configuration Panel**, on the **LDAP Settings** tab, click **OK**.

6. In Windows Services, restart the BlackBerry Mail Store Service.

Managing groups

<div style="float:right">4</div>

You can manage multiple user accounts by adding the user accounts to a group and managing the group. A group can contain user accounts, administrator accounts, and other groups (which are called child groups). When you configure properties for a group, the accounts and groups in the group inherit the properties.

The BlackBerry Device Service includes preconfigured groups. You can also create groups to meet your organization's requirements.

Preconfigured groups

The BlackBerry Device Service includes preconfigured groups and the preconfigured groups are assigned preconfigured roles. You can use the preconfigured groups in your organization's environment instead of creating new groups for administrators.

Preconfigured group	Description
Administrators	This is a preconfigured group for administrators. The Enterprise Administrator role is assigned to this group.
BlackBerry Web Desktop Manager users	This is a preconfigured group for BlackBerry Web Desktop Manager users. A role is not assigned to this group. This group allows BlackBerry device users to perform basic administrative tasks using the BlackBerry Web Desktop Manager. Examples of tasks that the users can perform are setting an activation password and locking the device.
Help desk representatives	This is a preconfigured group for administrators. The Junior Helpdesk role is assigned to this group.

Create a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Create a group**.
3. In the **Name** field, type a name for the group.
4. In the **Description** field, type a description for the group.
5. Click **Save**.

After you finish:

Change the group to configure the properties of the group.

Change a group

After you create a group, you can configure the properties for the group. When you add user accounts and administrator accounts to a group, the accounts inherit the properties of the group.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the group name.
4. Click **Edit group**.
5. Make the changes on the appropriate tabs.
6. Click **Save all**.

Delete a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the group name.
4. Click **Delete group**.
5. Click **Yes - Delete the group**.

Add child groups to a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the group name.
4. Click **Edit group**.
5. Click the **Child groups** tab.
6. Perform one of the following actions:

   - To add one child group to the group, select the child group in the **Available groups** list and click **Add**.
   - To add more than one child group to the group, select multiple child groups in the **Available groups** list and click **Add**.
   - To add all of the child groups to the group, click **Add all**.
7. Click **Save all**.

Delete child groups from a parent group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the group name.
4. Click **Edit group**.
5. Click the **Child groups** tab.
6. Perform one of the following actions:

    - To delete one child group from the group, select the child group in the **Current groups** list and click **Remove**.
    - To delete more than one child group from the group, select multiple child groups in the **Current groups** list and click **Remove**.
    - To delete all of the child groups from the group, click **Remove all**.

7. Click **Save all**.

Add roles to a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the group name.
4. Click **Edit group**.
5. Click the **Roles** tab.
6. Perform one of the following actions:

    - To add one role to the group, select the role in the **Available roles** list and click **Add**.
    - To add more than one role to the group, select multiple roles in the **Available roles** list and click **Add**.
    - To add all of the roles to the group, click **Add all**.

7. Click **Save all**.

Related information

Managing roles, 28

Delete roles from a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the group name.
4. Click **Edit group**.

5. Click the **Roles** tab.

6. Perform one of the following actions:

    - To delete one role from the group, select the role in the **Current roles** list and click **Remove**.
    - To delete more than one role from the group, select multiple roles in the **Current roles** list and click **Remove**.
    - To delete all of the roles from the group, click **Remove all**.

7. Click **Save all**.

Related information

Managing roles, 28

Add software configurations to a group

You can add a software configuration to a group to control the software on the BlackBerry devices that are associated with the user accounts in the group.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the name of the group.
4. Click **Edit group**.
5. Click the **Software configurations** tab.
6. Perform one of the following actions:

    - To add one software configuration to the group, select the software configuration and click **Add**.
    - To add more than one software configuration to the group, select multiple software configurations and click **Add**.
    - To add all of the software configurations to the group, click **Add all**.

7. Click **Save all**.

Related information

Managing software configurations, 40

Delete software configurations from a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the name of the group.
4. Click **Edit group**.
5. Click the **software configurations** tab.
6. Perform one of the following actions:

    - To delete one software configuration from the group, select the software configuration and click **Remove**.

- To delete more than one software configuration from the group, select multiple software configurations and click **Remove**.
- To delete all of the software configurations from the group, click **Remove all**.

7. Click **Save all**.

Related information

Managing software configurations, 40

Add an IT policy to a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the name of the group.
4. Click **Edit group**.
5. Click the **Policies** tab.
6. In the **IT policy** list, select the IT policy.
7. Click **Save all**.

Related information

Managing IT policies, 42

Delete an IT policy from a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the name of the group.
4. Click **Edit group**.
5. On the **Policies** tab, in the **IT policy** list, select the empty field.
6. Click **Save all**.

Related information

Managing IT policies, 42

Add Wi-Fi profiles to a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the name of the group.

4. Click **Edit group**.

5. Click the **Wi-Fi profiles** tab.

6. Perform one of the following actions:

   - To add one Wi-Fi profile to the group, select the profile in the **Available Wi-Fi profiles** list and click **Add**.
   - To add more than one Wi-Fi profile to the group, select multiple profiles in the **Available Wi-Fi profiles** list and click **Add**.
   - To add all of the Wi-Fi profiles to the group, click **Add all**.

7. Click **Save all**.

Related information

Managing Wi-Fi profiles, 47

Delete Wi-Fi profiles from a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.

2. Click **Manage groups**.

3. Click the group name.

4. Click **Edit group**.

5. Click the **Wi-Fi profiles** tab.

6. Perform one of the following actions:

   - To delete one Wi-Fi profile from the group, select the profile in the **Wi-Fi profiles** list and click **Remove**.
   - To delete more than one Wi-Fi profile from the group, select multiple profile in the **Current roles** list and click **Remove**.
   - To delete all of the Wi-Fi profiles from the group, click **Remove all**.

7. Click **Save all**.

Related information

Managing Wi-Fi profiles, 47

Add VPN profiles to a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.

2. Click **Manage groups**.

3. Click the group name.

4. Click **Edit group**.

5. Click the **VPN profiles** tab.

6. Perform one of the following actions:

   - To add one VPN profile to the group, select the profile in the **Available VPN profiles** list and click **Add**.

- To add more than one VPN profile to the group, select multiple profiles in the **Available VPN profiles** list and click **Add**.
- To add all of the VPN profiles to the group, click **Add all**.

7. Click **Save all**.

Related information

Delete VPN profiles from a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the group name.
4. Click **Edit group**.
5. Click the **VPN profiles** tab.
6. Perform one of the following actions:

   - To delete one VPN profile from the group, select the profile in the **Current VPN profile** list and click **Remove**.
   - To delete more than one VPN profile from the group, select multiple profiles in the **Current roles** list and click **Remove**.
   - To delete all of the VPN profiles from the group, click **Remove all**.

7. Click **Save all**.

Related information

Add user accounts and administrator accounts to a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the display name of the group.
4. Click **Add users to group membership**.
5. Select the user accounts and administrator accounts that you want to add to the group.
6. Click **Add to group membership**.

Delete user accounts and administrator accounts from a group

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Group**.
2. Click **Manage groups**.
3. Click the display name of the group.
4. Click **Remove users from group membership**.
5. Select the user accounts and administrator accounts that you want to delete.
6. Click **Remove from group membership**.

Managing roles

<div style="text-align:right">5</div>

You can use roles to specify the information that an administrator can view and the tasks that an administrator can perform in the BlackBerry Device Service. Each role consists of a set of permissions that are assigned to an administrator account. The permissions do not apply to the BlackBerry Configuration Panel.

You can use a preconfigured role or create a role to meet your organization's requirements. You can assign a role to an administrator account to manage permissions for a single administrator account or you can assign a role to a group to manage permissions for all of the administrator accounts in the group. If you assign a role to a user account, the user account becomes an administrator account.

You can assign multiple roles to an administrator account (both directly and by assigning the roles to the group that the user account belongs to). If you assign multiple roles to an administrator account, the administrator has all of the permissions that are turned on for each of the assigned roles.

Preconfigured roles

The BlackBerry Device Service includes preconfigured roles. You can use a preconfigured role, change the preconfigured role and then use it, or copy the preconfigured role and use it as a template for a new role.

Preconfigured role name	Description
Enterprise Administrator	This role has permission to perform all tasks in the BlackBerry Device Service except changing role assignments. This role can only view role assignments.
Junior Helpdesk Administrator	This role has permission to perform basic administrative tasks in the BlackBerry Device Service.
Security Administrator	This role has permission to perform all tasks in the BlackBerry Device Service.
Senior Helpdesk Administrator	This role has permission to perform advanced administrative tasks in the BlackBerry Device Service.
Server Only Administrator	This role has permissions to perform system management tasks in the BlackBerry Device Service.
User Only Administrator	This role has permission to perform user management tasks in the BlackBerry Device Service.

View the permission of a role

1. In the BlackBerry Device Service, on the **BlackBerry solution management** menu, expand **Role**.
2. Click **Manage roles**.
3. Click the role.

4. View the permission for the role on the **User and device**, **Topology**, and **BlackBerry Administration Service setup** tabs.

Create a role

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Role**.
2. Click **Create a role**.
3. In the **Name** field, type a name for the role.
4. In the **Description** field, type a description for the role.
5. Click **Save**.

After you finish:

Change a role to configure the properties of the role.

Copy a role

You can create a role by copying the permissions from an existing role. Copying a role allows you to use a role as a template for a new role.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Role**.
2. Click **Manage roles**.
3. In the list of roles, click the name of the role that you want to copy.
4. Click **Copy role**.
5. In the **Name** field, type a name for the role.
6. In the **Description** field, type a description for the role.
7. Click **Copy role**.

After you finish:

Change a role to configure the properties of the role.

Change a role

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Role**.
2. Click **Manage roles**.
3. In the list of roles, click the name of the role.
4. Click **Edit role**.
5. Make the changes on the appropriate tabs.
6. Click **Save all**.

Delete a role

If you delete a role that you assigned to an administrator account or a group, the administrator account or group no longer has the permissions that are associated with the role.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Role**.
2. Click **Manage roles**.
3. In the list of roles, click the name of the role that you want to delete.
4. Click **Delete role**.
5. Click **Yes - Delete the role**.

Managing software

Managing applications

You can use the BlackBerry Device Service to install and manage third-party applications on BlackBerry PlayBook tablets. You can specify the versions of the applications that you want to install, update, or remove, and you can specify which applications are required or optional on tablets. If you specify that an application is optional, the BlackBerry Device Service makes the application available to the user for installation on the Work tab in the BlackBerry App World storefront. If you specify that an application is required, the application is automatically installed on the tablet and the user cannot remove it.

When you use the BlackBerry Device Service to manage applications, the applications are considered work applications and are installed in the work perimeter on tablets. The applications can only access work data and interact with other work applications that are also located in the work perimeter. The applications have read-only access to personal data and cannot interact with personal applications that are located in the personal perimeter. You cannot manage or remove the personal applications that BlackBerry PlayBook users installed on their tablets.

Application developers can use various development tools to create, test, and package applications so that you can install them on the tablets in your organization's environment. For more information about the development tools, visit www.blackberry.com/developers.

Note: The work perimeters on tablets do not support Android Runtime applications.

Sending applications to tablets

To send applications to BlackBerry PlayBook tablets, you must perform the following actions:

- Obtain the .bar files from the application developers who compiled the applications.
- Specify a shared network folder for the applications using the BlackBerry Administration Service.
- Add the applications to the BlackBerry Administration Service application repository.
- Create a software configuration.
- Add the applications to the software configuration.
- Assign the software configuration to user accounts or groups.

After you complete these tasks, the tablet downloads the applications for installation the next time that the tablet connects to the BlackBerry Device Service.

Specify a shared network folder for applications

The BlackBerry Administration Service must access the shared network folder to store application files and install applications on BlackBerry devices. Do not add application files directly to the shared network folder or make changes to the files that the BlackBerry Administration Service stores in the shared network folder.

Before you begin:

- Create a shared network folder on the network that hosts the BlackBerry Device Service. This shared network folder must not be located in *<drive>*:\Program Files\Common Files\Research In Motion.

- Verify that the service account for the BlackBerry Administration Service Application Server has write permissions for the shared network folder.

- Verify that devices and the computer that hosts the BlackBerry Device Service have read access to the shared network folder.

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view**.
2. Click **BlackBerry Administration Service**.
3. Click **Edit component**.
4. In the **Software management** section, in the **BlackBerry Administration Service application shared network drive** field, type the path of the shared network folder using the following format: \ *<BlackBerry_Administration_Service_computer_name>**<shared_folder>*. The shared network path must be typed in UNC format (for example, \\ComputerName\Applications\Testing).
5. Click **Save all**.

Add an application to the application repository

To send a new or updated application to BlackBerry devices, you must first add the application bundle to the application repository.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Software** > **Applications**.
2. Click **Add or update applications**.
3. In the **Application location** section, click **Browse**. Navigate to the application bundle that you want to add to, or update in, the application repository.
4. Click **Next**.
5. Click **Publish application**.

Using keywords to search for applications in the application repository

If you add multiple applications to the application repository, you can improve how quickly you find the application by specifying keywords for the application.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Software** > **Applications**.
2. Click **Manage applications**.
3. Search for an application.
4. In the search results, click the name of an application.
5. Click **Edit application**.
6. In the **Application keywords** field, type a keyword.
7. Click the **Add** icon.
8. Repeat steps 6 and 7 for each keyword that you want to add.

9. Click **Save all**.

Reconciling multiple software configurations that are assigned to a user account

If you assign multiple software configurations to user accounts or groups, the multiple software configurations might contain conflicting settings. For example, you might specify that an application is required in a software configuration that you assign to a user account, but you might also specify that the same application is optional in a software configuration that you assign to a group that the user account belongs to.

The BlackBerry Administration Service uses predefined reconciliation rules to reconcile conflicting settings in multiple software configurations, and to determine which applications and settings the BlackBerry Administration Service applies to a BlackBerry device. The BlackBerry Administration Service reconciles conflicting settings as an asynchronous background activity. You can view the outcome of the reconciliation activities, reconciliation errors, and the applications and settings that the BlackBerry Administration Service applied to a device.

The BlackBerry Administration Service might have to reconcile software configuration settings that conflict if you perform any of the following actions:

- Activate a device
- Assign a new device to a user
- Assign a user account to or remove a user account from a group
- Add a group to or remove a group from another group
- Add an application to or remove an application from a software configuration
- Change the settings for an application in a software configuration

Reconciliation rules for applications

Scenario	Rule
Multiple software configurations are assigned to a user account or the groups the user account belongs to. Multiple applications are contained in each software configuration.	The applications in each software configuration are installed on the BlackBerry device.
Multiple software configurations that contain different versions of the same application are assigned to a user account or the groups the user account belongs to.	When different versions of an application exist in the software configurations that are assigned to a user account, the latest version of the application is installed on the device. For example, if a software configuration with version 1.0 of an application is assigned to a user account, and another software configuration with version 2.0 of the application is assigned to a user account, version 2.0 of the application is installed on the device. The version of an application that is in a software configuration that is assigned to a user account takes

Scenario	Rule
	precedence over the version of an application that is in a software configuration that is assigned to a group. For example, if version 1.0 of an application is in a software configuration that is assigned to a user account, and version 2.0 of an application is in a software configuration that is assigned to a group that the user belongs to, version 1.0 of the application is installed on the device.
Multiple software configurations that contain the same application are assigned to a user account or the groups the user belongs to. The disposition of the application (required or optional) is different in each software configuration.	The disposition specified for an application in a software configuration that is assigned to a user account takes precedence over the disposition of the same application in any software configuration that is assigned to a group. If the application has different dispositions in multiple software configurations that are assigned at the same level (either to the user account or groups), the required disposition takes precedence over the optional disposition.
One or more software configurations that include applications are assigned to a user account or the groups the user belongs to, but a limited amount of available memory remains on the device.	The BlackBerry Administration Service checks the amount of available memory on the device after resolving application conflicts (for example, resolving conflicting disposition settings) and before installing an application. If there is not enough memory available on the device to support the application, the application is not installed. Required applications take precedence over optional applications.
A software configuration is assigned to a user account and it contains an application that has a dependency on another application.	If an application in a software configuration has a dependency on another application, and the other application is not included in a software configuration that is assigned to the user account or a group that the user belongs to, the application is not installed on the device. If an application in a software configuration has a dependency on another application, and the dependent application is included in a software configuration that is assigned to the user account or a group the user belongs to, the dependent application is installed first. If the dependent application is installed successfully, the application with the dependency is then installed.
A software configuration is assigned to a user account and it contains an application that has a dependency on	If a dependent application is not supported by the device or was not installed successfully on the device, the

Scenario	Rule
another application. The dependent application is not supported on the device.	application with the dependency is not installed on the user's device.
Multiple applications have a circular dependency (for example, application A is dependent on application B, application B is dependent on application C, and application C is dependent on application A) and are included in the same application bundle. The application bundle is added to the application repository. The applications are added to a software configuration and assigned to a user account or a group the user belongs to.	If multiple applications are included in the same application bundle and have a circular dependency, the applications are not installed on the device. If multiple applications have a circular dependency, they can only be installed if they exist in separate application bundles.

View how the BlackBerry Administration Service resolved software configuration conflicts for a user account

You can assign multiple software configurations to a user account or group. The BlackBerry Administration Service uses specific rules to resolve conflicting settings in the multiple software configurations that you assign to a user account or group. After the BlackBerry Administration Service applies software configurations to a BlackBerry device, you can view how the BlackBerry Administration Service resolved any of the conflicting settings in the multiple software configurations.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. Click the name of a user account.
5. On the **Software configuration** tab, click **View resolved applications**.
6. View the appropriate information about how the BlackBerry Administration Service resolved the software configuration conflicts for the user account.

Removing and troubleshooting applications

Make an application unavailable for installation

You can delete an application and all versions of the application from the application repository if you do not want the application to be available to add to software configurations. You cannot delete an application from the application repository if the application is in a software configuration.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Software** > **Applications**.
2. Click **Manage applications**.
3. Search for an application.
4. In the search results, click the name of the application.
5. Click **Delete application**.

6. Click **Yes - Delete the application and all application versions**.

Change how to install, update, or remove required applications

You can change the settings that the BlackBerry Administration Service uses to install and upgrade required applications on BlackBerry devices or remove required applications from devices. If you change the default application distribution settings, there might be a performance effect on your organization's environment.

1. In the BlackBerry Administration Service, on the **Devices** menu, expand **Deployment jobs**.
2. Click **Specify application distribution settings**.
3. Click **Edit distribution settings**.
4. Perform any of the following tasks:

Task	Steps
Change when the BlackBerry Administration Service can install, upgrade, or remove applications.	1. Click the **Edit** icon for the default schedule. 2. In the **Scheduled deployment day(s)** drop-down list, click the appropriate recurrence option. If necessary, select the days that the BlackBerry Administration Service can install, upgrade, or remove applications. 3. In the **Start time** drop-down list, click the appropriate option. If necessary, change the start time and end time. 4. Click the **Update** icon. By default, the BlackBerry Administration Service can install, upgrade, or remove applications every day.
Add a new schedule for installing, upgrading, or removing applications.	Any schedules that you add cannot overlap with other existing schedules. 1. In the **Scheduled deployment day(s)** drop-down list, click the appropriate recurrence option. If necessary, select the days that the BlackBerry Administration Service can install, upgrade, or remove applications. 2. In the **Start time** drop-down list, click the appropriate option. If necessary, change the start time and end time. 3. Click the **Add** icon.

5. On the **System throttling** tab, in the **Maximum number of simultaneous tasks per BlackBerry Administration Service instance** field, type the maximum number of tasks that you want the BlackBerry Administration Service to process at the same time.

   The default value is 1000.
6. On the **Job throttling** tab, to turn on throttling for all application tasks in jobs, select **Enabled to reduce load on system**.
7. If necessary, in the **Default throttling for all application tasks in each job in a time window** section, in the **Maximum number of simultaneous tasks per BlackBerry Administration Service instance** field, type the maximum number of application tasks that you want the BlackBerry Administration Service to process at the same time. The default value is 25.

8. If necessary, in the **Total number of tasks per time window per BlackBerry Administration Service instance** field, type the total number of application tasks that you want the BlackBerry Administration Service to process during each processing interval. The default value is 150.

9. Click **Save all**.

Error messages: Application tasks

To troubleshoot errors that display for a task when you send an application to a BlackBerry PlayBook tablet, or update an application on a tablet, you can try to determine the cause by collecting the following information:

- Enterprise Management Web Service log files from the day the issue was reported (log level 4 recommended)
- BlackBerry Administration Service log files from the day the issue was reported (log level 4 recommended)
- Tablet information (for example, the tablet model, IT policy assigned to the tablet, profiles on the tablet, and so on)
- Event log of the tablet from the day the issue was reported

If the preceding information does not help you to address the issue, you can collect the following information:

- System event logs
- Copy of the BlackBerry Configuration Database

For information about obtaining the event log for a tablet, visit www.blackberry.com/go/kbhelp to read article KB26038.

If the suggested administrative action for an error message does not resolve the issue, contact RIM Technical Support.

The .bar file contains information that applies to existing applications. A new version of the .bar file will be applied to the existing applications.	This message displays when you are uploading an updated version of an application. The updated version of the application replaces the existing version in the application repository. The update is automatically made available to tablets for installation.
The .bar file contains information that applies to existing applications. A version of this .bar file already exists. The existing applications will not be updated.	This message displays when you try to upload a version of an application that already exists in the application repository.

The .bar file contains new information. You do not have permission to create new applications.	This message displays when another administrator changes your permissions so that you can no longer add applications while you are trying to add an application to the application repository.
The .bar file contains information that applies to an existing application. You do not have permission to update existing applications.	This message displays when another administrator changes your permissions so that you can no longer update applications while you are trying to update an application in the application repository.
The name {0} or description {1} in the descriptor file {2} is invalid.	This message displays when the descriptor file includes an invalid name or invalid description (for example, the name or description is too long). To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.
The vendor {0} in descriptor file {1} is invalid.	This message displays when the descriptor file includes invalid vendor information (for example, the vendor name is too long). To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.
The copyright {0} in descriptor file {1} is invalid.	This message displays when the copyright statement for a vendor is not valid (for example, the copyright statement is too long). To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.
The application identifier or application name must be specified in the descriptor file {0}.	This message displays when the descriptor file does not include a name or identifier for the application that you are adding. To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.
The vendor name in descriptor file: {0} for application: {1} is missing.	This message displays when the descriptor file does not include a vendor name. To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.
The attribute "{0}" in the descriptor file {1} is missing.	This message displays when the descriptor file does not include a required attribute (for example, the application ID or the name of the application is missing). To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.

The attribute "{0}" with value "{1}" in the descriptor file {2} is invalid.	This message displays when the descriptor file includes an attribute with an incorrect value. To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.
The attribute "{0}" in the descriptor file {1} is invalid.	This message displays when the descriptor file includes an attribute that does not conform to the expected descriptor file syntax. To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.
The syntax or format of the descriptor file {0} is invalid.	This message displays when the descriptor file does not conform to the expected descriptor file syntax. To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.
The attribute "{0}" appears twice in the descriptor file {1}.	This message appears when the descriptor includes an attribute that appears more than once in the descriptor file. To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.
The package descriptor version "{0}" in the descriptor file {1} is not supported.	This message appears when the descriptor file includes a version of the descriptor file specification that is not supported. To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.
The attribute "{0}" is missing and must be the first attribute in the descriptor file {1}.	This message appears when the descriptor file is missing a required attribute that must appear as the first attribute in the file. To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.
The installed plug-ins do not support content type "{0}".	This message appears when the content type included in the descriptor file is not supported. To resolve this error, you must ask your developer to generate a descriptor file with valid information and recompile or repackage the application.
The .bar file is invalid because the manifest file is missing. The application could not be published.	This message appears when the developer did not include the application manifest file when the developer generated the .bar file. To resolve this error, you must ask your developer to recompile the application with a manifest file.

Delete an application from a software configuration

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Software**.
2. Click **Manage software configurations**.
3. Click a software configuration.

4. Click **Edit software configuration**.

5. On the **Applications** tab, click the **Delete** icon for the application.

6. Click **Save all**.

Add an application to a software configuration

You must add an application to a software configuration to send the application to BlackBerry devices. If you want to upgrade an application, you must add the new version of the application to the appropriate software configuration.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Software**.

2. Click **Manage software configurations**.

3. Click the software configuration that you want to add an application to.

4. Click **Edit software configuration**.

5. On the **Applications** tab, click **Add applications to software configuration**.

6. Search for the application that you want to add to the software configuration.

7. In the search results, select an application that you want to add to the software configuration.

8. In the **Disposition** drop-down list for the application, perform one of the following actions:

    • To install the application automatically on devices, and to prevent users from removing the application, select
      Required.
    • To permit users to install and remove the application, and to add the application to the Work tab in the
      BlackBerry App World storefront, select **Optional**.

9. Repeat steps 6 to 8 for each application that you want to add to the software configuration.

10. Click **Add to software configuration**.

11. Click **Save all**.

Managing software configurations

You can use software configurations to bundle applications so that the applications can be installed on BlackBerry devices. When you create a software configuration, you can specify the following:

• Versions of the work applications that you want to install on devices

• Applications that are required or optional

After you create a software configuration, you can assign it to a group or individual user accounts. The BlackBerry Administration Service creates a deployment job to make the required applications available for devices to download and install. A deployment job consists of a number of tasks. Each task manages the delivery of a specific object (for example, an application) by communicating with the appropriate BlackBerry Device Service components. The BlackBerry PlayBook tablet automatically installs required applications in the work perimeter after the tablet downloads them.

Deployment jobs are not created for optional applications. Optional applications are made available in the Work tab on the BlackBerry App World storefront. Users can choose whether they want to download, install, or remove optional applications.

To remove an application from devices, you can remove the application from a software configuration.

Create a software configuration

1.   In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Software**.
2.   Click **Create a software configuration**.
3.   In the **Configuration information** section, in the **Name** field, type a name for the software configuration.
4.   Click **Save**.

After you finish: Add applications to the software configuration.

Change a software configuration

1.   In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Software**.
2.   Click **Manage software configurations**.
3.   Click the name of the software configuration.
4.   Click **Edit software configurations**.
5.   Make the changes on the appropriate tabs.
6.   Click **Save all**.

Delete a software configuration

1.   In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Software**.
2.   Click **Manage software configurations**.
3.   Click the name of the software configuration.
4.   Click **Edit software configurations**.
5.   Click **Delete software configuration**.
6.   Click **Yes - Delete the software configuration**.

Managing IT policies

<div style="text-align: right">7</div>

You can use IT policies to control and manage BlackBerry devices in your organization's environment. An IT policy consists of multiple IT policy rules that manage the security and behavior of the BlackBerry Device Service and devices. For example, you can use IT policy rules to manage the following security features and behaviors of the device:

- Encryption
- Use of a password or passphrase
- Connections that use Bluetooth wireless technology

The Default IT policy includes IT policy rules that are configured to indicate the default behavior of the device.

After a user activates a device, the automatically sends the IT policy to the device that you assigned to the user account or group. By default, if you do not assign an IT policy to the user account or group, the BlackBerry Device Service sends the Default IT policy. If you delete an IT policy that you assigned to the user account or group, the BlackBerry Device Service automatically reassigns the Default IT policy to the user account and resends the Default IT policy to the device.

For more information, see the *BlackBerry Device Service Policy Reference Guide.*

Preconfigured IT policy

The BlackBerry Device Service includes the following preconfigured IT policy. You can change the preconfigured IT policy to meet the requirements of your organization or copy this IT policy to create new IT policies.

Preconfigured IT policy	Description
Default	This policy includes all the standard IT policy rules that are set on the BlackBerry Device Service.

Create an IT policy

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Click **Create an IT policy**.
3. In the **Name** field, type a name for the IT policy.
4. In the **Description** field, type a description for the IT policy.
5. Click **Save**.

After you finish:

Change an IT policy to set the IT policy rules.

Copy an IT policy

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Click **Manage IT policies** .
3. Click the name of the IT policy.
4. Click **Copy IT policy**.
5. In the **Name** field, type a name for the IT policy.
6. In the **Description** field, type a description for the IT policy.
7. Click **Save**.

After you finish:

Change an IT policy to set the IT policy rules.

Import IT policies

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Click **Manage IT policies**.
3. Click **Import IT policy list**.
4. Click **Browse** and navigate to the location of the IT policy export file.
5. Type the password for the IT policy export file in the **File encryption password** field.
6. Click **Next**.
7. Click **Add all IT policies**.

Export IT policies

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Click **Manage IT policies**.
3. Click **Export IT policy list**.
4. Type and confirm a file encryption password.
5. Click **Export**.
6. Click **Download file**.

Import IT policy rules from an IT policy pack

You can import the IT policy rules that Research In Motion releases in an IT policy pack into your organization's BlackBerry Device Service.

1. Download the IT policy pack to your computer and extract the contents of the file.
2. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
3. Click **Manage IT policy rules**.
4. Click **Import IT policy definitions**.
5. Navigate to and select the XML file that contains the IT policy rules (for example, ITPolicyTemplate082409.xml).
6. Click **Save**.

Change an IT policy

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Click **Manage IT policies**.
3. Click the name of the IT policy.
4. Click **Edit IT policy**.
5. Make the changes on the appropriate tabs.
6. Click **Save all**.

Delete an IT policy

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Click **Manage IT policies**.
3. Click the name of the IT policy.
4. Click **Delete IT policy**.
5. Click **Yes - Delete the IT policy**.

View the IT policies assigned to user accounts and administrator accounts

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Click **Manage IT policies**.
3. Click the name of the IT policy.

4. Click **View users with reconciled IT policy**.

Add a certification authority profile to an IT policy

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Click **Manage IT policies**.
3. Click the name of the IT policy.
4. Click **Edit IT policy**.
5. Click the **Certification Authority Profile** tab.
6. Type the certificate authority information and certificate settings in the appropriate fields.
7. Click **Save all**.

Resolving IT policy conflicts

If you add a user account to multiple groups, multiple IT policies can be added to the user account. You can control how the BlackBerry Device Service applies the correct IT policies and IT policy rules to the user account.

The BlackBerry Device Service applies the IT policy that you assign directly to the user account first.

If you do not assign an IT policy directly to the user account, the BlackBerry Device Service applies the IT policies that you assign to the group using one of the following methods:

Method	Description
Apply one IT policy to the user account	You can configure the BlackBerry Device Service to apply only one IT policy to a user account. If you select this method to resolve IT policy conflicts, the BlackBerry Device Service applies the IT policy with the highest ranking in the BlackBerry Administration Service.
Apply multiple IT policies to a user account	You can configure the BlackBerry Device Service to apply multiple IT policies to a user account. If you select this method to resolve IT policy conflicts, the BlackBerry Device Service combines the IT policies into one IT policy and applies it to the user account.
	A conflict occurs when you change an IT policy rule from the default value to different values in different IT policies. If there is a conflict between IT policy rules in different IT policies, the BlackBerry Device Service uses the IT policy rule from the IT policy with the highest ranking in the BlackBerry Administration Service.

Preview IT policy resolution

You can preview how the BlackBerry Device Service applies IT policies to user accounts that have multiple IT policies added to them.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Click **Manage IT policies**.
3. Click **Preview resolved IT policies**.
4. Select the conflicting IT policies.
5. Click **Preview**.

Change how the BlackBerry Device Service resolves IT policy conflicts

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry solution topology** > **BlackBerry Domain** > **Component view**.
2. Click **BlackBerry Administration Service** .
3. Click **Switch method to resolve multiple IT policies**.
4. Click **Yes - Switch the method**.

Set the priority of IT policies

The priority of IT policies determines when the BlackBerry Device Service applies IT policies and IT policy rules to user accounts.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Click **Manage IT policies**.
3. Click **Set priority of IT policies**.
4. Click the **up arrow** and **down arrow** icons to set the priority of IT policies.
5. Click **Save**.

Managing profiles

Managing Wi-Fi profiles

You can create a Wi-Fi profile to specify how BlackBerry PlayBook tablet users connect to your organization's Wi-Fi network.

Note: When you add a Wi-Fi profile to a user account, both personal and work applications on the tablet can use the profile settings to access your organization's network. To prevent personal applications from connecting to your organization's network, set the Network Access Control for Work Applications IT policy rule.

For more information, see the *BlackBerry Device Service Policy Reference Guide.*

Create a Wi-Fi profile

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Expand **Wi-Fi configuration**.
3. Click **Create Wi-Fi profile**.
4. Type a name and description for the Wi-Fi profile.
5. Click **Save**.

After you finish:

Change a Wi-Fi profile to set the Wi-Fi profile settings.

Change a Wi-Fi profile

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Expand **Wi-Fi configuration**.
3. Click **Manage Wi-Fi profiles**.
4. Click the name of the Wi-Fi profile.
5. Click **Edit profile**.
6. Make changes on the appropriate tabs.
7. Click **Save all**.

Delete a Wi-Fi profile

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Expand **Wi-Fi configuration**.
3. Click **Manage Wi-Fi profiles**.
4. Click the name of the Wi-Fi profile.
5. Click **Delete profile**.

6. Click **Yes - Delete the profile**.

Add a VPN profile to a Wi-Fi profile

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Expand **Wi-Fi configuration**.
3. Click **Manage Wi-Fi profiles**.
4. Click the name of the Wi-Fi profile.
5. Click **Edit profile**.
6. On the **Wi-Fi profile settings** tab, in the **Associated VPN Profile** drop-down list, select the VPN profile..
7. Click **Save all**.

Related information

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Delete a VPN profile from a Wi-Fi profile

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Expand **Wi-Fi configuration**.
3. Click **Manage Wi-Fi profiles**.
4. Click the name of the Wi-Fi profile.
5. Click **Edit profile**.
6. On the **Wi-Fi profile settings** tab, in the **Associated VPN Profile** drop-down list, select the blank field.
7. Click **Save all**.

Related information

Managing VPN profiles, 48

Managing VPN profiles

You can create a VPN profile to specify how BlackBerry PlayBook tablet users connect to your organization's VPN.

Note: When you add a VPN profile to a user account, both personal and work applications on the tablet can use the profile settings to access your organization's network. To prevent personal applications from connecting to your organization's network, set the Network Access Control for Work Applications IT policy rule to Yes.

For more information, see the *BlackBerry Device Service Policy Reference Guide.*

Create a VPN profile

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Expand **Wi-Fi configuration**.
3. Click **Create VPN profile**.

4. Type a name and description for the VPN profile.
5. Click **Save**.

After you finish:

Change a VPN profile to set the VPN profile settings.

Change a VPN profile

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Expand **Wi-Fi configuration**.
3. Click **Manage VPN profiles**.
4. Click the name of the VPN profile.
5. Click **Edit profile**.
6. Make changes on the appropriate tabs.
7. Click **Save all**.

Delete a VPN profile

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Policy**.
2. Expand **Wi-Fi configuration**.
3. Click **Manage VPN profiles**.
4. Click the name of the VPN profile.
5. Click **Delete profile**.
6. Click **Yes - Delete the profile**.

Managing email profiles

You can use email profiles to specify how BlackBerry PlayBook tablets connect to your organization's messaging server and synchronize email messages and organizer data using Microsoft ActiveSync. You can add email profiles to user accounts.

Email profiles include the following settings.

Setting	Description
Type	This setting specifies the type of email account for the email profile.
Server name	This setting specifies the name of the messaging server.
Use SSL	This setting specifies whether SSL is allowed when the tablet connects to the messaging server.
Push enabled	This setting specifies whether the messaging server can push email messages and organizer data to the tablet.

Setting	Description
Days to synchronize	This setting specifies the number of days prior that the tablet synchronizes with.
Interval between synchronizations	This setting specifies how often the tablet checks the messaging server for notifications and email messages that the messaging server does not push to the tablet.
Email synchronization	This setting specifies whether the tablet synchronizes email messages with the messaging server.
Calendar synchronization	This setting specifies whether the tablet synchronizes calendar entries with the messaging server.
Contact synchronization	This setting specifies whether the tablet synchronizes contacts with the messaging server.

Create an email profile

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Email profiles**.
2. Click **Create an email profile**.
3. Type a name and description (optional) for the email profile.
4. In the **Type** drop-down list, select the email profile type.
5. Click **Save**.

After you finish:

Change the email profile to configure the email profile settings.

Copy an email profile

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Email profiles**.
2. Click **Manage email profiles**.
3. Click the email profile.
4. Click **Copy profile**.
5. Type a name and description (optional) for the email profile.
6. Click **Save**.

After you finish:

Change the email profile to configure the email profile settings.

Change an email profile

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Email profiles**.

2.   Click **Manage email profiles**.

3.   Click the email profile.

4.   Click **Edit profile**.

5.   Make the changes on the appropriate tabs.

6.   Click **Save all**.

Email profile settings by messaging server

The following table outlines the email profile settings that specific messaging servers require.

Email profile setting	Microsoft Exchange	IBM Lotus Domino	Novell GroupWise
Account name	Not required	Not required	Not required
Email address	Required	Required	Required
Domain	Required	Do not use	Do not use
Username	Required	Required	Required
Server name	Required messagingservername.addr ess.com	Required messagingserver.address.co m/servlet/traveler	Required

Delete an email profile

When you delete an email profile, you might prevent tablets from connecting to messaging servers.

1.   In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Email profiles**.

2.   Click **Manage email profiles**.

3.   Click the email profile.

4.   Click **Delete profile**.

5.   Click **Yes - Delete the profile**.

Managing administrator accounts

You can use administrator accounts to control who can view information and perform tasks in the BlackBerry Administration Service. You can create an administrator account that only exists on the BlackBerry Device Service or you can assign a role to a user account that exists in your organization's user directory.

Create an administrator account

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Administrator user**.
2. Click **Create an administrator user**.
3. In the **Display name** field, type a name for the administrator account.
4. To configure the login information that the administrator account uses to log in to the BlackBerry Administration Service, complete one of the following tasks:

Task	Steps
Configure Microsoft Active Directory authentication. This task is only available if you choose Microsoft Active Directory as the directory type.	1. In the **Authentication type** list, select **Active Directory**. 2. In the **User name** field, type the username for the administrator account. 3. In the **Domain** field, type the domain for the administrator account. 4. In the **Administrator password** field, type your password.
Configure BlackBerry Administration Service authentication	1. In the **Authentication type** list, select **BlackBerry Administration Service**. 2. In the **User name** field, type the username for the administrator account. 3. In the **Password** and **Confirm Password** field, type the password for the administrator account. 4. In the **Administrator password** field, type your password.

5. In the **Role** drop-down list, click the role that you want to assign to the administrator account.
6. Click **Create an administrator user**.

After you finish:

Change the administrator account to set the account properties.

Change an administrator account

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Administrator user**.
2. Click **Manage users**.

3. Search for an administrator account.
4. In the search results, click the display name of the administrator account.
5. Click **Edit user**.
6. Make the changes on the appropriate tabs.
7. Click **Save all**.

Delete an administrator account

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Administrator user**.
2. Click **Manage users**.
3. Search for an administrator account.
4. In the search results, click the display name of the administrator account.
5. In the **Status** list, click **Delete user**.
6. Click **Yes - Delete the user**.

Add an administrator account to a group

When you add an administrator account to a group, the administrator account inherits the roles, configurations, IT policies, and profiles of the group.

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Administrator user**.
2. Click **Manage users**.
3. Search for an administrator account.
4. In the search results, click the administrator account.
5. Click **Edit user**.
6. On the **Groups** tab, in the **Available groups** list, click the group that you want to add the administrator account to.
7. Click **Add**.
8. Click **Save all**.

Related information

Managing groups, 20

Delete administrator accounts from a group

1. In the BlackBerry Administration Service on the **BlackBerry solution management** menu, expand **Administrator user**.

2. Click **Manage users**.

3. Search for the administrator account that you want to delete.

4. In the search results, click the display name of the administrator account.

5. Click **Edit user**.

6. On the **Groups** tab, perform one of the following actions:

    *   To delete the administrator account from one group, select the group in the **Current groups** list and click **Remove**.
    *   To delete the administrator account from more than one group, select multiple groups in the **Current groups** list and click **Remove**.
    *   To delete the administrator account from all of the groups, click **Remove all**.

7. Click **Save all**.

Related information

Add a role to an administrator account

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **Administrator user**.

2. Click **Manage users**.

3. Search for an administrator account.

4. In the search results, click the display name for the administrator account.

5. Click **Edit user**.

6. On the **Roles** tab, select the role and click **Add**.

7. Click **Save all**.

Related information

Delete roles from an administrator account

1. In the BlackBerry Administration Service on the **BlackBerry solution management** menu, expand **Administrator user**.

2. Click **Manage users**.

3. Search for the administrator account.

4. In the search results, click the display name of the administrator account.

5. Click **Edit user**.

6. On the **Roles** tab, perform one of the following actions:

    *   To delete one role from the administrator account, select the group in the **Current roles** list and click **Remove**.

- To delete more than one role from the administrator account, select multiple roles in the **Current roles** list and click **Remove**.
- To delete all of the roles from the administrator account, click **Remove all**.

7. Click **Save all**.

Related information

Managing devices

Activating a tablet

To activate a BlackBerry PlayBook tablet, you can use one of the following methods.

Method	Description
BlackBerry Administration Service	You can activate a tablet by connecting the tablet to a computer and logging into the BlackBerry Administration Service. After the tablet is activated, you can distribute it to a user.
BlackBerry Web Desktop Manager	A user can activate a tablet by connecting the tablet to a computer and logging into the BlackBerry Web Desktop Manager.

Preparing to activate a tablet

Action	Description
Add an IT policy to a user account	You can use an IT policy to extend your organization's security policies to a BlackBerry PlayBook tablet.
Add a Wi-Fi profile to a user account	A tablet can use aWi-Fi profile to connect to your organization's Wi-Fi network.
Add a VPN profile to a user account	A tablet can use a VPN profile to connect to your organization's VPN gateway.
Add an email profile to a user account	A tablet can use an email profile to connect to your organization's messaging system.
Permit a user to activate devices using the BlackBerry Web Desktop Manager	A user can use BlackBerry Web Desktop Manager to activate a tablet.

Activate a tablet using the BlackBerry Administration Service

1. Connect the BlackBerry PlayBook tablet to a computer that can access the BlackBerry Administration Service.
2. In the BlackBerry Administration Service, on the **Devices** menu, expand **Attached devices**.
3. Click **Manage current device**.
4. Click **Assign the current device to a user**.
5. Search for the user account.
6. In the search results, select the user account.

7. Click **Associate user**.

Activating devices using the BlackBerry Web Desktop Manager

A user can activate a new BlackBerry device, reactivate an existing device, or switch services from one device to another device by connecting the device to a computer using a USB cable and logging in to the BlackBerry Web Desktop Manager.

When a user connects a device to a computer and logs in to BlackBerry Web Desktop Manager, the activation process starts automatically. If a user activates a device that has a work perimeter on it, the BlackBerry Web Desktop Manager displays a warning message to indicate that the work data and work applications on the device are going to be deleted. When the user confirms that the tablet should be activated, the existing work perimeter is deleted, and a new work perimeter is created.

To reactivate an existing device, the user selects the Reactivate the device option in the Device Management section. If the device has an existing work perimeter, the user must confirm that the tablet should be activated.

To switch services from one device to another device, the user connects the new device to a computer and when the user receives a prompt, the user confirms that the user wants to switch the BlackBerry services to the new device.

For more information, see the *BlackBerry Web Desktop Manager User Guide*.

Reactivate a tablet

When you reactivate a BlackBerry PlayBook tablet, the work perimeter on the tablet is deleted but the tablet remains assigned to the same user account.

1. In the BlackBerry Administration Service, on the **Devices** menu, expand **Attached devices**.
2. Click **Manage current device**.
3. Click **Reactivate current device for current user**.
4. Click **Yes - Reactivate the device**.

Lock a tablet

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, click the display name for the user account.
5. Click **Specify new device password and lock device**.

Switch a tablet

You can change the BlackBerry PlayBook tablet that is activated for a user account. When you switch tablets for a user account, data is not transferred from one tablet to the other.

1. In the BlackBerry Administration Service, on the **Devices** menu, expand **Attached devices**.
2. Click **Manage current device**.
3. Click **Assign current user a different connected device**.
4. In the **PIN** drop-down list, select the PIN of the tablet that you want to activate.
5. Click **Yes - Switch BlackBerry services to this device**.

Resend IT policies to a tablet

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Resend IT policy to selected devices**.

Send root certificates to every tablet that is managed by the BlackBerry Device Service

The root certificate folder in the shared network folder for applications contains root certificates that are sent to every BlackBerry PlayBook tablet that is managed by the BlackBerry Device Service. When the contents of the Certificates folder change, all certificates in the folder are sent to the tablet to replace the previous certificates.

1. In the shared folder for applications on the network, create a folder named Certificates, if one does not already exist. The folder name is not case-sensitive.
2. Obtain .pem files for the root certificates.
3. Copy the .pem files to the **Certificates** folder.

Related information
Specify a shared network folder for applications, 31

Remove root certificates from every tablet that is managed by the BlackBerry Device Service

The root certificate folder contains root certificates that are stored on every BlackBerry PlayBook tablet that is managed by the BlackBerry Device Service.

1. In the **Certificates** folder, remove the .pem file for a root certificate.

   Note: Renaming or deleting the Certificates folder does not remove the certificates from the tablets.

Deactivating a tablet

Delete work data and deactivate a tablet

1. In the BlackBerry Administration Service, on the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users**.
3. Search for a user account.
4. In the search results, select the check box for the user account.
5. Click **Disable as BlackBerry user**.
6. Click **Yes - Disable as BlackBerry user**.

Troubleshooting devices

The computer blocks incoming connections from a tablet

Possible cause

The Windows firewall blocks communication from a BlackBerry PlayBook tablet to the Enterprise Management Web Service.

Possible solution

Create a firewall exception for incoming TCP traffic to RIMProxy.exe. The default port for RIMProxy.exe is 5666.

The computer uses an incorrect certificate template for the SCEP

Possible cause

By default, Windows Server 2008 uses the IPSECIntermediateOffline template to generate a certificate from the SCEP. This template does provide the correct Extended Key Usage for the signed certificate for IPsec and Wi-Fi connections.

Possible solution

Change the certificate template that the Network Device Enrollment Service in Windows Server 2008 uses to generate from the SCEP. For more information, see technet.microsoft.com.

Managing deployment jobs

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The BlackBerry Administration Service creates jobs to deliver applications, profiles, and IT policies to BlackBerry devices in the following scenarios:

- You create a software configuration, IT policy, or profile (Wi-Fi, VPN, email, or certificate) and assign it to user accounts or groups
- You change a software configuration, IT policy, or profile

A job consists of multiple tasks. Each task delivers a specific object or setting (for example, a required application or IT policy) to a device.

You can change the default settings that control how the BlackBerry Administration Service creates jobs and delivers tasks to devices. You can also change the default settings that the BlackBerry Administration Service uses to deliver applications, IT policies, and profiles to devices.

Specify job schedule settings

You can change the default settings for a job to control how the BlackBerry Administration Service processes jobs. If you change the default settings for a job, there might be a performance effect on your organization's environment.

1. In the BlackBerry Administration Service, on the **Devices** menu, expand **Deployment jobs**.
2. Click **Specify job schedule settings**.
3. Click **Edit job schedule settings**.
4. In the **Default delay for each job** section, in the **Default delay** field, type the number of minutes that the BlackBerry Administration Service waits before it creates and processes a job.
   The default value is 15 minutes.
5. In the **General** section, in the **Mark job as failed** field, type the number of days that the BlackBerry Administration Service waits before it defines a job that was not delivered to BlackBerry devices as failed.
   The default value is 30 days.
6. In the **Purge jobs** field, type the number of days that the BlackBerry Administration Service waits before it deletes a failed job or a completed job.
   The default value is 7 days.
7. Click **Save all**.

Specify IT policy distribution settings

You can specify when the BlackBerry Administration Service sends IT policy information to BlackBerry devices.

1. In the BlackBerry Administration Service, on the **Devices** menu, expand **Deployment jobs**.
2. Click **Specify IT policy distribution settings**.
3. Click **Edit distribution settings**.

4. On the **Default schedule** tab, set the default schedule for IT policy distribution.

5. On the **System throttling** tab, set the maximum number of tasks that the BlackBerry Administration Service attempts simultaneously.

6. On the **Job throttling** tab, select whether to enable the default throttling for IT policy tasks.

7. Click **Save all**.

Specify application distribution settings

You can change how the BlackBerry Administration Service installs, updates, or removes required applications in a specific job on BlackBerry devices. You can change a job's distribution settings for applications only if the job is not running. If you change the default application distribution settings, there might be a performance effect on your organization's environment.

1. In the BlackBerry Administration Service, on the **Devices** menu, expand **Deployment jobs**.

2. Click **Manage deployment jobs**.

3. Search for the job that you want to change.

4. In the search results, click the ID of the job that you want to change.

5. Click **Edit job**.

6. On the **Application Distribution** tab, perform any of the following tasks:

Task	Steps
Change when the BlackBerry Administration Service can install, upgrade, or remove applications in a specific job.	1. Click the **Edit** icon for the default recurrence day. 2. In the **Scheduled deployment day(s)** drop-down list, click the appropriate recurrence option. If necessary, select the days the BlackBerry Administration Service can install, upgrade, or remove applications. 3. In the **Start time** drop-down list, click the appropriate option. If necessary, change the start time and end time. 4. Click the **Update** icon. By default, the BlackBerry Administration Service can install, upgrade, or remove applications every day.
Add a new schedule for installing, upgrading, or removing applications in a specific job.	Any schedules that you add cannot overlap with other existing schedules. 1. In the **Scheduled deployment day(s)** drop-down list, click the appropriate recurrence option. If necessary, select the recurrence days. 2. In the **Start time** drop-down list, click the appropriate option. If necessary, change the start time and end time. 3. Click the **Add** icon.

7. To turn on throttling for all application tasks in the job, in the **Default throttling enablement for all application tasks in each job in a time window** section, select **Enabled to reduce load on system**.

8. If necessary, in the **Default throttling for all application tasks in each job in a time window** section, in the **Maximum number of simultaneous tasks per BlackBerry Administration Service instance** field, type the maximum number of application tasks in the job that you want the BlackBerry Administration Service to process at the same time.

    The default value is 25.

9. If necessary, in the **Total number of tasks per time window per BlackBerry Administration Service instance** field, type the total number of application tasks in the job that you want the BlackBerry Administration Service to process during each processing interval.

    The default value is 150.

10. Click **Save all**.

View the status of a job

You can view the status of a job to determine if it is ready to run, currently running, completed, or completed with task failures.

1. In the BlackBerry Administration Service, on the **Devices** menu, expand **Deployment jobs**.
2. Click **Manage deployment jobs**.
3. Search for a job.
4. In the search results, in the **Status** column, view the status of the job.
5. To view more information about a job or to change a job, click the ID of the job.

View the status of a task

Each deployment job consists of multiple tasks. Each task delivers a specific object or setting to a BlackBerry device and completes an action (for example, installing or removing an application or applying updated IT policy settings). You can view the status of tasks. If the BlackBerry Device Service does not complete a task, you can view error messages that help you troubleshoot the task failure.

1. In the BlackBerry Administration Service, on the **Devices** menu, expand **Deployment jobs**.
2. Click **Manage deployment job tasks**.
3. Search for a task.
4. In the search results, in the **Status** column, view the status of the task.
5. To view more information about a task, click **More**.

Stopping a job that is running

When you stop a job, the following events occur:

•   The BlackBerry Administration Service stops processing the remaining tasks in the job.

•   The BlackBerry Administration Service changes the scheduled start time for the job to the following day.

- The job returns to Ready to run status.

If you do not want the job to run again on the following day, you can make changes to the start time, priority, and distribution settings of the job after you stop it. When the job starts again, the BlackBerry Administration Service processes the remaining tasks in the job.

If you want to delete a job, change the start date of the job to a date that exceeds the job failure period that you configured in the job schedule settings. The default job failure period is 30 days.

Stop a job that is running

1. In the BlackBerry Administration Service, on the **Devices** menu, expand **Deployment jobs**.
2. Click **Manage deployment jobs**.
3. Search for the job that you want to stop.
4. In the search results, click the ID of the job that you want to stop.

   You can only stop jobs with a Running status.
5. Click **Stop Current Execution**.
6. Click **Yes - Stop Current Execution**.

Configuring the BlackBerry Web Desktop Manager

You can configure the BlackBerry Web Desktop Manager to permit users to perform administrative tasks such as creating a password for wireless activation, locking a lost or stolen BlackBerry device, deleting data from a device, or deactivating a device.

You can also customize the UI of the BlackBerry Web Desktop Manager by changing the text colors or displaying a custom image, such as your organization's logo, to match the design of your organization's intranet.

For more information about the IT policies that control the tasks that users can perform in the BlackBerry Web Desktop Manager, see the *BlackBerry Enterprise Server Policy Reference Guide* .

For more information about using the BlackBerry Web Desktop Manager to update the BlackBerry Device Software, see the *BlackBerry Device Software Update Guide* .

Permit users to perform administrative tasks using the BlackBerry Web Desktop Manager

You can permit users to perform the following administrative tasks using the BlackBerry Web Desktop Manager:

- specify an enterprise activation password for a BlackBerry device
- specify a new device password and lock a device
- delete all device data and deactivate a device
- assign a new device to a user account

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution Topology** > **BlackBerry Domain** > **Component view**.
2. Click **BlackBerry Administration Service**.
3. Click **Edit component**.
4. On the **BlackBerry Web Desktop Manager information** tab, change **Allow users to perform self service tasks** to **Yes**.
5. Click **Save all**.

Permit users to activate devices using the BlackBerry Web Desktop Manager

You can specify whether users can use the BlackBerry Web Desktop Manager to activate BlackBerry devices using a wired connection to a computer.

1. In the BlackBerry Administration Service, in the **Servers and components** menu, expand **BlackBerry Solution Topology** > **BlackBerry Domain** > **Component view**.
2. Click **BlackBerry Administration Service**.
3. Click **Edit component**.
4. On the **BlackBerry Web Desktop Manager information** tab, perform one of the following actions:

    - To permit users to activate or re-activate devices, change **Allow user wireline activation** to **Activate Any PIN**.
    - To permit users to activate new devices only, change **Allow user wireline activation** to **Activate Unused PIN only**.
    - To prevent users from activiating devices, change **Allow user wireline activation** to **No**.
5. Click **Save all**.

Change the text colors in the BlackBerry Web Desktop Manager

You can change the text colors in BlackBerry Web Desktop Manager to match the colors that your organization uses for UIs.

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view**.
2. Click **BlackBerry Administration Service**.
3. On the **Font colors** tab, click **Edit Component**.
4. Type the name of the color, in hexadecimal format, for the color of the BlackBerry Web Desktop Manager text that you want to change.
5. Click **Save All**.

Display a custom image in the BlackBerry Web Desktop Manager

You can display a custom image, such as your organization's logo, in the upper-right corner of the BlackBerry Web Desktop Manager. The image file that you specify must be a .jpg or .gif file that is located on a trusted web site.

1. In the BlackBerry Administration Service, in the **Servers and components** menu, expand **BlackBerry Solution Topology** > **BlackBerry Domain** > **Component view** .
2. Click **BlackBerry Administration Service**.
3. Click **Edit component**.
4. On the **Company logos** tab, type the HTTPS URL for your organization's logo.
5. Click **Save all**.

Display the domain name on the login page of the BlackBerry Web Desktop Manager

You can specify the domain name that appears automatically in the Domain field when users browse to the BlackBerry Web Desktop Manager login page. You can specify only one domain name. You can also provide the domain name to users when you send their login information to them.

1. In the BlackBerry Administration Service, in the **Servers and components** menu, expand **BlackBerry Solution Topology** > **BlackBerry Domain** > **Component view**.
2. Click **BlackBerry Administration Service**.
3. Click **Edit component**.
4. On the **Microsoft® Active Directory® authentication** tab, in the **Login domain** section, in the **Default domain** field, type the name of the default domain that users log in from.
5. Click **Save all**.

Making the BlackBerry Web Desktop Manager available to users

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Installing the client components of the BlackBerry Web Desktop Manager on users' computers

By default, when users open and log in to the BlackBerry Web Desktop Manager for the first time, the browser prompts them to accept a client authentication certificate and install the required RIMWebComponents.cab file. The RIMWebComponents.cab file provides the BlackBerry Device Manager and USB drivers that users require to use the BlackBerry Web Desktop Manager. To install these RIMWebComponents.cab file, users must log in to their computers as a local administrator.

If you use Microsoft Active Directory in your organization's environment, consider creating Windows GPOs to install the client components of the BlackBerry Web Desktop Manager on users' computers automatically. When you use Windows GPOs, the browser does not display the security warning or installation prompts to users, and users do not require local administrator permissions to complete the installation process.

Publish the client files for the BlackBerry Web Desktop Manager in a Windows GPO for Windows XP

If you use Microsoft Active Directory, you can create a Windows GPO to make sure that the browser settings are correct for your organization's environment. Alternatively, you can check the browser settings on users' computers and, if necessary, change them manually.

1. In the BlackBerry Enterprise Server installation files, navigate to tools/RIMWebComponents.
2. Copy the **RIMWebComponents.msi** file to a shared network folder.
3. In Microsoft Active Directory Users and Computers, right-click the organizational unit that you want to assign the Windows GPO to. Click **Properties**.
4. On the **Group Policy** tab, click **New**.
5. In the **Name** field, type a name for the new GPO.
6. In the list of GPOs, click the GPO name.
7. Click **Edit**.
8. In the **Group Policy Editor** menu, click **User Configuration** > **Software Settings**.
9. Right-click **Software Installation**. Click **New** > **Package**.
10. Type the UNC path and name of the **RIMWebComponents.msi**. The path must be typed in UNC format (for example, \\ComputerName\Applications\Testing).
11. Click **Open**.

12.   In the **Deploy Software** window, click **Advanced**.

13.   Click **OK**.

14.   In the **Group Policy Object** properties window, on the **Deployment** tab, under **Deployment type**, click **Published**.

15.   In the **Installation user interface options** menu, click **Basic**.

16.   If the computer runs Windows Server 2003, perform the following actions:

    a.   On the **Deployment** tab, click **Advanced**.

    b.   Click **Include OLE class and product information**.

17.   Click **OK**.

After you finish: Perform one of the following actions:

• On each user's computer that runs a 32-bit version of Windows, add the registry key HKEY_LOCAL_MACHINE \Software\Microsoft\WindowCurrentVersion\Internet Settings\UseCoInstall.

• On each user's computer that runs a 64-bit version of Windows, add the registry key HKEY_LOCAL_MACHINE \Software\WOW6432Node\Microsoft\WindowCurrentVersion\Internet Settings\UseCoInstall.

Publish the client files for the BlackBerry Web Desktop Manager in a Windows GPO for Windows Vista and Windows 7

Before you begin:

• Add the web address for the BlackBerry Administration Service to the list of trusted web sites in the web browser.

• Download and install the Microsoft Group Policy Management Console with Service Pack 1. For more information about installing the service pack, see www.microsoft.com.

• Add the BlackBerry Administration Service certificate to the Trusted Root Certification Authorities in your browser.

1.   Open the Microsoft Exchange Management Console.

2.   Click **File** > **Add/Remove Snap-in**.

3.   In the **Available Snap-ins** list, click **Group Policy Management**.

4.   Click **Add**.

5.   Click **OK.**

6.   Expand **Group Policy Management** > **Forest**> **Domains**.

7.   Click the domain name.

8.   Right-click the organizational unit that you want to assign the Windows GPO to.

9.   Click **Create a GPO in this domain, and link it here**.

10.   In the **Name** field, type a name for the new GPO.

11.   Click **OK**.

12.   Right-click the GPO that you just created. Click **Edit**.

13. On the **Computer Configuration** menu, click **Policies**.

14. Expand **Administrator Templates**.

15. Expand **Windows Components**.

16. Click **ActiveXInstaller Service**.

17. Right-click **Approved Installation Sites for ActiveX Controls**.

18. Select **Properties**.

19. On the **Settings** tab, click **Enabled**.

20. Click **Show**.

21. Click **Add**.

22. In the **Enter the name of the item to be added** field, type the web address for the BlackBerry Administration Service.

23. In the **Enter the value of the item to be added** field, type **2,2,1,0**.

24. In each dialogue box, click **OK**.

Configure the Microsoft ActiveX Installer on Windows Vista

1. On the computer that hosts the BlackBerry Web Desktop Manager, click **Start** > **Control Panel** > **Programs and Features**.

2. Click **Turn Windows Features On or Off**.

3. Select **ActiveX Installer Service**.

4. Click **OK**.

Configure users' computers to install the client file for the BlackBerry Web Desktop Manager automatically

You can create a new Windows GPO so that you can add the registry key HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Internet Settings\UseCoInstall to users' computers. When you add the registry key, the users' computers install the RIMWebComponents.msi file and other Microsoft ActiveX controls automatically. The Windows GPO adds the registry key to computers in the organizational unit that you assigned the GPO to.

1. On the computer that hosts Microsoft Active Directory, in a new text file, copy and paste the following lines:

   CLASS MACHINE

   CATEGORY !!RegistrySettings

   KEYNAME "Software\Microsoft\Windows\CurrentVersion\Internet Settings"

   ;KEYNAME "Software\Policies\Microsoft\Windows\CurrentVersion\Internet Settings"

   POLICY !!EnableActiveXInstallFromAD

   EXPLAIN !!EnableActiveXInstallFromAD_Explain

   VALUENAME "UseCoInstall"

VALUEON NUMERIC 1

VALUEOFF NUMERIC 0

END POLICY

END CATEGORY

[strings]

EnableActiveXInstallFromAD="Allow user computers to install administrator-approved Microsoft ActiveX components."

EnableActiveXInstallFromAD_Explain="Allow user computers to install administrator-approved Microsoft ActiveX components."

RegistrySettings="Registry Settings"

2.   Name the file **EnableActiveXInstallFromAD.adm** and save it.

3.   In Microsoft Active Directory Users and Computers, right-click the organizational unit that you want to assign the Windows GPO to. Click **Properties**.

4.   On the **Group Policy** tab, click **New**.

5.   In the **Name** field, type a name for the new GPO.

6.   In the list of GPOs, click the GPO name. Click **Edit**.

7.   In the **Group Policy Object Editor** list, click **Computer Configuration** > **Administrative Templates**.

8.   Right-click **Administrative Templates**. Perform one of the following actions:

   • If the computer uses Windows 2000 Server, clear the **View – Show Policies Only** option.
   • If the computer uses Windows Server 2003, click **View – Filtering**. Clear the **Only show policy settings that can be fully managed** check box.

9.   Right-click **Administrative Templates**. Click **Add/Remove Templates**.

10. Add the EnableActiveXInstallFromAD.adm custom administrative template to the Windows GPO.

11. Click **Administrative Templates** > **Registry Settings**.

12. Double-click **Allow user computers to install administrator-approved Microsoft ActiveX components**.

13. Click **Enabled**.

14. Click **OK**.

After you finish: For more information about registry-based Windows GPOs, visit technet.microsoft.com to read *Using Administrative Template Files with Registry-Based Group Policy*.

Direct users to the BlackBerry Web Desktop Manager web address

The BlackBerry Web Desktop Manager web address is https://*<full_computer_name>* /webdesktop/login. If you customized the BlackBerry Web Desktop Manager text colors or image and you want to display the changes on the login screen, you must direct users to https://*<full_computer_name>*/webdesktop/app?page=Login&service=page&orgId=0.

1. Send users the following information:

    • BlackBerry Web Desktop Manager web address

    • login information that you configured for the users in your messaging environment

    • if necessary, the name of the domain that your messaging server is located in

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Connection types and port numbers

BlackBerry Administration Service connection types and port numbers

Connection	Connection type	Default port number
BlackBerry Configuration Database connection You can configure this connection in the BlackBerry Configuration Panel. • Database Connectivity tab You can configure this connection in the Windows registry. • 32-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Research In Motion\BlackBerry Enterprise Server\Database\Port • 64-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Research In Motion\BlackBerry Enterprise Server\Database\Port	TCP	1433
Browser connection You can configure this connection in the BlackBerry Configuration Panel. • Administration Service tab You can configure this connection in the Windows registry. • 32-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Research In Motion\BlackBerry Enterprise Server\Administration Service\BASHostHTTPSPort • 64-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Research In Motion\BlackBerry Enterprise Server\Administration Service\BASHostHTTPSPort	HTTPS	443
Browser connection You can configure this connection in the BlackBerry Configuration Panel. • Administration Service tab You can configure this connection in the Windows registry.	HTTP	18180

Connection	Connection type	Default port number
• 32-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Research In Motion\BlackBerry Enterprise Server\Administration Service\BASHostHTTPPort • 64-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Research In Motion\BlackBerry Enterprise Server\Administration Service\BASHostHTTPPort		
Java Naming and Directory Interface (HA) connection You can configure this connection in the BlackBerry Configuration Panel. • Administration Service tab You can configure this connection in the Windows registry. • 32-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Research In Motion\BlackBerry Enterprise Server\Administration Service\BASHostHAJNDIPort • 64-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Research In Motion\BlackBerry Enterprise Server\Administration Service \BASHostHAJNDIPort	TCP	11100
Java Naming and Directory Interface (Local) connection You can configure this connection in the BlackBerry Configuration Panel. • Administration Service tab	TCP	11099
BAS-AS Dynamic Class Loading connection You can configure this connection in the BlackBerry Configuration Panel. • Administration Service tab	TCP	18083
BAS-AS Java RMI connection You can configure this connection in the BlackBerry Configuration Panel. • Administration Service tab	TCP	13873
BAS-AS Java RMI over SSL connection You can configure this connection in the BlackBerry Configuration Panel. • Administration Service tab	TLS	13843
BAS-NCC Dynamic Class Loading connection	TCP	28083

Connection	Connection type	Default port number
You can configure this connection in the BlackBerry Configuration Panel. • Administration Service tab		
BAS-NCC Java RMI over SSL connection You can configure this connection in the BlackBerry Configuration Panel. • Administration Service tab	TLS	23843
BAS-NCC Java Naming and Directory Interface (Local) connection You can configure this connection in the BlackBerry Configuration Panel. • Administration Service tab	TCP	21099

Change the BlackBerry Administration Service port numbers

1. On the computer that hosts the BlackBerry Device Service, open the BlackBerry Configuration Panel.
2. On the **Administration Service** tab, in the **Port Settings** window, change the applicable ports.
3. Click **OK**.

BlackBerry Configuration Database connection types and port numbers

Connection	Connection type	Default port number
BlackBerry Device Service connection You can configure this connection in the BlackBerry Configuration Panel. • Database Connectivity tab You can configure this connection in the Windows registry. • 32-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Research In Motion\BlackBerry Enterprise Server\Database\Port • 64-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Research In Motion\BlackBerry Enterprise Server\Database\Port	TCP	1433

Change the BlackBerry Configuration Database port numbers

You can change the port that the BlackBerry Device Service uses to connect to the BlackBerry Configuration Database. Perform this task if you change the port that the Microsoft SQL Server uses.

1. On the computer that hosts the BlackBerry Device Service, open the BlackBerry Configuration Panel.
2. On the **Database Connectivity** tab, in the **Use Dynamic ports or specify SQL port** field, type the port number.
3. Click **OK**.

BlackBerry Dispatcher connection types and port numbers

Connection	Connection type	Default port number
BlackBerry Configuration Database connection You can configure this connection in the BlackBerry Configuration Panel. • Database Connectivity tab You can configure this connection in the Windows registry. • 32-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Research In Motion\BlackBerry Enterprise Server\Database\Port • 64-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Research In Motion\BlackBerry Enterprise Server\Database\Port	TCP	1433
Outbound SRP connection You can configure this connection in the BlackBerry Configuration Panel • SRP Setting tab	TCP	3101
Inbound SRP connection You can configure this connection in the BlackBerry Configuration Panel • SRP Settings tab	TCP	3101
BlackBerry Device Service connection	TCP	3200
Incoming data connections You can configure this connection in the Windows registry.	TCP	5096

Connection	Connection type	Default port number
• 32-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Research In Motion\BlackBerry Enterprise Server\Agents\TcpPortDispatcher • 64-bit: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Research In Motion\BlackBerry Enterprise Server\Agents\TcpPortDispatcher		

Change the SRP port numbers

1. On the computer that hosts the BlackBerry Device Service, open the BlackBerry Configuration Panel.
2. On the **SRP Settings** tab, perform the following actions:
   a. In the **SRP host port (outbound)** field, type the outbound port.
   b. In the **BlackBerry services connection port (inbound)** field, type the inbound port.
3. Click **OK**.

Enterprise Management Web Service connection types and port numbers

Item	Connection type	Default port number
Enterprise Management Web Service configuration	HTTP	8081
Enrollment configuration	HTTPS	8444

Restarting BlackBerry Device Service components

You can restart BlackBerry Device Service components using the Windows Services. When you complete certain administrative tasks, you must restart one or more BlackBerry Device Service components.

Restarting one component

To restart one BlackBerry Device Service component at a time, you can use the restart functionality in Windows Services.

Restarting all components

To restart all of the BlackBerry Device Service components, you must stop and start the components in a specific order.

Stop the components in the following order:

1. BlackBerry Controller
2. BlackBerry Dispatcher

3. All remaining components

Start the components in the following order:

1. BlackBerry Dispatcher
2. BlackBerry Controller
3. All remaining components

Managing BlackBerry CAL keys

BlackBerry Client Access License keys control how many user accounts the BlackBerry Device Service supports. If you exceed the number of user accounts that is supported by your organization's BlackBerry CAL keys, the BlackBerry Administration Service informs you that your organization requires additional BlackBerry CAL keys.

View a BlackBerry CAL key

1. In the BlackBerry Device Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view**.
2. Click **BlackBerry Administration Service**.
3. In the **License key** section, click the **View** icon.

Add a BlackBerry CAL key

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view**.
2. Click **BlackBerry Administration Service**.
3. Click **Edit component**.
4. In the **License key** section, type the information for the BlackBerry Client Access License key and click the **Add** icon.
5. Click **Save all**.

Change a BlackBerry CAL key

If you add more than one BlackBerry Client Access License key to your organization's BlackBerry Device Service, you can change the BlackBerry CAL key information.

1. In the BlackBerry Device Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view**.
2. Click **BlackBerry Administration Service**.
3. Click **Edit component**.
4. In the **License key** section, click the **Edit** icon beside the BlackBerry CAL key that you want to change.
5. Make changes to the BlackBerry CAL key information and click the **Update** icon.

6. Click **Save all**.

Delete a BlackBerry CAL key

If you add more than one BlackBerry Client Access License key to your organization, you can delete a BlackBerry CAL key.

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view**.
2. Click **BlackBerry Administration Service**.
3. Click **Edit component**.
4. In the **License key** section, click the **Delete** icon beside the BlackBerry CAL that you want to delete.
5. Click **Save all**.

Changing the security settings of the BlackBerry Administration Service and BlackBerry Web Desktop Manager

Configuring Microsoft Active Directory authentication in an environment that includes a resource forest

If your organization's environment includes a resource forest that is dedicated to running Microsoft Exchange, you can configure Microsoft Active Directory authentication for BlackBerry device users that have user accounts that are located in trusted account forests. The BlackBerry Administration Service can use Microsoft Active Directory authentication to log users into the BlackBerry Administration Service console and BlackBerry Web Desktop Manager.

If a resource forest exists in your organization's environment, you must install the BlackBerry Device Service in the resource forest. In the resource forest, you create a mailbox for each user account and associate the mailboxes with the user accounts. When you associate the mailboxes in the resource forest with user accounts in the account forests, the user accounts obtain full access to the mailboxes and the user accounts in the account forests are connected to the Microsoft Exchange server.

To authenticate users who log in to the BlackBerry Administration Service or BlackBerry Web Desktop Manager, the BlackBerry Administration Service must read the user information that is stored in the global catalog servers that are part of the resource forest. To configure the BlackBerry Administration Service to authenticate user accounts that are associated with mailboxes in the resource forest, you must create a Microsoft Active Directory account for the BlackBerry Administration Service that is located in a Windows domain that is part of the resource forest. During the BlackBerry Device Service installation process, you provide the Windows domain, user name, and password for the Microsoft Active Directory account, and, if required, the names of the global catalog servers that the BlackBerry Administration Service can use. You can change the Windows domain, user name, and password for the Microsoft Active Directory account and global catalog servers after the installation process completes.

For more information, visit technet.microsoft.com to read *Using a Dedicated Exchange forest*.

Change the information for Microsoft Active Directory authentication

Before you begin:

- Create a Microsoft Active Directory account for the BlackBerry Administration Service that is located in a Windows domain that is part of the resource forest. When you create the account, specify a password that meets the security requirements of your organization and configure the following password settings:

    - The user is not required to change the password at next login
    - The user's password never expires

1. In the BlackBerry Administration Service, expand **BlackBerry solution topology** > **BlackBerry Domain** > **Component view**.
2. Click **BlackBerry Administration Service**.
3. On the **Microsoft® Active Directory® authentication** tab, click **Edit component**.
4. In the **User name** field, type the name of the Microsoft Active Directory account that has permission to access the user containers and read the user objects that are stored in the global catalog servers that are located in the resource forest.
5. In the **Password** field and **Confirm password** field, type the password for the Microsoft Active Directory account.
6. In the **User domain** field, type the name of the Windows domain that is a part of the resource forest.
7. In the **Global Catalog search base** field, perform one of the following actions:

    - To permit the BlackBerry Administration Service to search the global catalog, leave the **Global Catalog search base** field blank.
    - To control the user accounts that the BlackBerry Administration Service can authenticate with, type the distinguished name of the user container (for example, OU=sales,DC=example,DC=com).
8. If you want the BlackBerry Administration Service to find all of the global catalog servers in the resource forest automatically, in the **Global Catalog server discovery** drop-down list, click **Automatic**.
9. If you want to configure the global catalog servers that the BlackBerry Administration Service can access, in the **Global Catalog server discovery** drop-down list, click **Select server from the list below** and perform the following actions:
    a. In the **Global Catalog server** section, type the FQDN of the global catalog server that you want the BlackBerry Administration Service to access (for example, globalcatalog01.example.com). You must type the FQDN of a global catalog server that is located in the Windows domain that the Microsoft Active Directory account is located in.
    b. Click the **Add** icon.
    c. Perform this step for each global catalog server that you want the BlackBerry Administration Service to access.
10. Click **Save All**.

The BlackBerry Administration Service validates the information for Microsoft Active Directory authentication. If the information is valid, the BlackBerry Administration Service implements the changes immediately and you do not need to restart the BlackBerry Administration Service services. If the information is invalid, the BlackBerry Administration Service prompts you to specify correct information.

Configuring single sign-on authentication for the BlackBerry Administration Service and BlackBerry Web Desktop Manager

If you configure the BlackBerry Administration Service to support Microsoft Active Directory authentication, you can turn on single sign-on authentication. Single sign-on authentication permits you to access the BlackBerry Administration Service and users to access the BlackBerry Web Desktop Manager without requiring that you or the users type a Microsoft Active Directory user name and password. By default, if you log in to the BlackBerry Administration Service or users log in to the BlackBerry Web Desktop Manager using Microsoft Active Directory authentication, the browser prompts you or the users to type a Microsoft Active Directory user name and password. If you turn on single sign-on authentication, and you log in to a computer using a Microsoft Active Directory account, you can bypass the login screen and access the BlackBerry Administration Service and BlackBerry Web Desktop Manager directly.

BlackBerry Mobile Fusion Studio supports single sign-on authentication. If you configure single sign-on authentication for your organization's helpdesk administrators who use BlackBerry Mobile Fusion Studio, they can bypass the login screen to access BlackBerry Mobile Fusion Studio. Administrators can also bypass the BlackBerry Administration Service login screen when they access it directly from BlackBerry Mobile Fusion Studio using the MDM domains link.

Before you turn on single sign-on, you must configure constrained delegation for the Microsoft Active Directory account that the BlackBerry Administration Service uses.

Configure constrained delegation for the Microsoft Active Directory account to support single sign-on authentication

1. Use the Windows Server ADSI Edit tool to add the following SPNs for the BlackBerry Administration Service pool to the Microsoft Active Directory account:

   • HTTP/*<BlackBerry Administration Service_FQDN>* (for example, HTTP/BASconsole104.example.com)
   • BASPLUGIN111/*<BlackBerry Administration Service_FQDN>* (for example, BASPLUGIN111/ BASconsole104.example.com)

2. Configure the Microsoft Active Directory account for constrained delegation using the following settings:

   • Trust this user for delegation to specific services only
   • Use Kerberos only

3. In the Microsoft Active Directory account properties, on the **Delegation** tab, add BASPLUGIN111/*<BlackBerry Administration Service_FQDN>* to the list of services.

After you finish: For more information about configuring constrained delegation for the Microsoft Active Directory account so you can access the BlackBerry Administration Service, visit www.blackberry.com/go/kbhelp to read article KB22717.

Turn on single sign-on authentication for the BlackBerry Administration Service

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view**.
2. Click **BlackBerry Administration Service**.
3. On the **Microsoft® Active Directory® authentication** tab, click **Edit component**.

4. In the **Login domain** section, in the **Single sign-on authentication for BlackBerry Administration Service turned on** drop-down list, click **Yes.**

5. To configure the Microsoft Active Directory account for each forest, in the **Account forest name** section, type the domain name, user name, and password for the Microsoft Active Directory account.

6. Click **Save all**.

7. In the Windows Services, restart all of the BlackBerry Enterprise Server services.

8. Instruct all administrators and BlackBerry device users to add the web addresses for the BlackBerry Administration Service and BlackBerry Web Desktop Manager to the list of websites in the local intranet zone and install the certificate for the BlackBerry Administration Service or BlackBerry Web Desktop Manager in the certificate store of their computers.

BlackBerry Administration Service web addresses and BlackBerry Web Desktop Manager web addresses that support BlackBerry Administration Service single sign-on

If you configure BlackBerry Administration Service single sign-on, you must instruct administrators and BlackBerry Web Desktop Manager users to access the BlackBerry Administration Service console and BlackBerry Web Desktop Manager using the following web addresses:

- https://<*BlackBerry Administration Service_FQDN*>/webconsole/login
- https://<*BlackBerry Administration Service_FQDN*>/webdesktop/login

Single sign-on authentication takes precedence over other authentication methods that permit administrators and users to log in to the BlackBerry Administration Service console or BlackBerry Web Desktop Manager. If the security policies in your organization require that administrators or users use another authentication method, you must instruct administrators or users to access the BlackBerry Administration Service console or BlackBerry Web Desktop Manager using the following web addresses:

- https://<*BlackBerry Administration Service_FQDN*>/webconsole/app
- https://<*BlackBerry Administration Service_FQDN*>/webdesktop/app

Import a new SSL certificate for the BlackBerry Administration Service and BlackBerry Web Desktop Manager

Before you begin: If you want to use a trusted certificate, copy the root certificate of the certification authority to the computer that hosts the BlackBerry Administration Service.

When you install the BlackBerry Administration Service and BlackBerry Web Desktop Manager, the setup application generates an SSL certificate to protect the HTTPS connection. You can import a self-signed SSL certificate or a trusted certificate that a certification authority signs after the installation process completes.

For more information about using the keytool, visit java.sun.com/javase/6/docs/technotes/tools/windows/keytool.html.

1. On a computer that hosts a BlackBerry Administration Service instance, in <*drive*>:\Program Files\Research In Motion\BlackBerry PlayBook Administration Server\BAS\bin\web.keystore, back up the **web.keystore** file.

2. Using the keytool in <*drive*>:\Program Files\Java\<*JRE_version*>\bin, delete the default SSL certificate that the setup application generated (for example, keytool -delete -alias httpssl -keystore "<*drive*>:\Program Files\Research In Motion\BlackBerry PlayBook Administration Server\BAS\bin\web.keystore").

3. Using the keytool and the SSL password that you specified when you installed the BlackBerry Administration Service, generate a new entry and private key in the web.keystore file (for example, keytool -genkey -alias httpssl -keypass *<password>* -keystore "*<drive>*:\Program Files\Research In Motion\BlackBerry PlayBook Administration Server\BAS\bin\web.keystore"). When the keytool prompts you for the first name and last name, type the FQDN of the BlackBerry Administration Service. You can find the FQDN name in the BlackBerry Configuration Panel.

4. If you want to use a trusted certificate, import the root certificate of the certification authority using the keytool (for example, keytool -import -alias *<ca_alias_name>* -file *<root_certificate_file>*.cer -trustcacerts -keystore "*<drive>*:\Program Files\Research In Motion\BlackBerry PlayBook Administration Server\BAS\bin\web.keystore").

5. Use the keytool to generate a certificate signing request (for example, keytool -certreq -alias httpssl -file *<certreq_filename>*.csr -keystore "*<drive>*:\Program Files\Research In Motion\BlackBerry PlayBook Administration Server\BAS\bin\web.keystore").

6. Send the certificate signing request to a certification authority so that the certification authority can create the certificate.

7. When the certification authority returns the certificate, copy it into a text file and save it with a .cer extension.

8. Use the keytool to import the certificate to the web.keystore file (for example, keytool -import -alias httpssl -keystore "*<drive>*:\Program Files\Research In Motion\BlackBerry PlayBook Administration Server\BAS\bin\web.keystore" -file "*<certificate_filename>*.cer").

9. In the Windows Services, restart the BlackBerry Administration Service services.

Changing password settings for BlackBerry Administration Service authentication

If you use BlackBerry Administration Service authentication in your organization's environment, you can change the minimum password length and the date when passwords expire to meet the requirements of your organization's security policies. By default, the minimum password length is four characters and a password expires after 365 days. If you change the minimum password length, administrators that use passwords that do not meet the new minimum length are not required to change the passwords until the passwords expire.

Change password settings for BlackBerry Administration Service authentication

1. In the BlackBerry Administration Service, on the **Servers and components** menu, click **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view**.

2. Click **BlackBerry Administration Service**.

3. Click **Edit component**.

4. In the **Security settings** section, change the minimum password length and number of days until the password expires.

5. Click **Save all**.

Regenerate the system credentials for the BlackBerry Administration Service

The setup application generates the system credentials for the BlackBerry Administration Service during the installation process. The BlackBerry Administration Service uses the system credentials when it communicates with other BlackBerry Device Service components. If you suspect that the system credentials are compromised, you can generate new system credentials on the database server.

Before you begin: Verify that you have database owner permissions for the BlackBerry Configuration Database.

1. On the computer that hosts the BlackBerry Administration Service, in the Windows Services, stop the BlackBerry Administration Service services.
2. On the database server, in the BlackBerry Configuration Database, run the following SQL statement: `DELETE from BASTraits WHERE PlugInId=8 AND TraitId=0`.
3. On a computer that hosts the BlackBerry Administration Service instance, in the Windows Services, start the BlackBerry Administration Service services.

Monitoring the BlackBerry Device Service   15

Monitoring the BlackBerry Device Service with the BlackBerry Controller

The BlackBerry Controller monitors the BlackBerry Device Service so that it can detect when to start, restart, or stop the BlackBerry Device Service services.

Services that require database access are installed in manual start mode and the BlackBerry Controller starts the services when the BlackBerry Dispatcher verifies the connection to the database. Other services are installed in automatic start mode, and by default, the BlackBerry Controller restarts the services if the BlackBerry Controller detects that the services are inactive. By default, the BlackBerry Controller also restarts services if the BlackBerry Controller detects unresponsive threads or that a service is inactive for a long period of time.

Registry keys determine how the BlackBerry Controller monitors the BlackBerry Device Service and restarts the BlackBerry Device Service services. You can change the default behavior of the BlackBerry Controller by creating new registry keys and changing the default values of the registry keys.

Change how the BlackBerry Controller restarts a BlackBerry Device Service service

By default, the BlackBerry Controller restarts a BlackBerry Device Service service if the BlackBerry Device Service stops responding.

1. On the computer that hosts the BlackBerry Device Service, open the Registry Editor.
2. In the left pane, perform one of the following actions:

    • If you are running a 32-bit version of Windows, navigate to HKEY_LOCAL_MACHINE\Software\Research In Motion.
    • If you are running a 64-bit version of Windows, navigate to HKEY_LOCAL_MACHINE\Software\WOW6432Node \Research In Motion.
3. Perform any of the following tasks:

Task	Steps
Change how the BlackBerry Controller restarts the BlackBerry MDS Connection Service.	1. Click **BlackBerry Mobile Data Server**. 2. Double-click the DWORD value that is named **RestartOnCrash**. 3. In the **Value data** field, perform one of the following actions: • To prevent the BlackBerry Controller from restarting the BlackBerry MDS Connection Service if the service stops responding, type **0**.

Task	Steps
	• To permit the BlackBerry Controller to restart the BlackBerry MDS Connection Service if the service stops responding, type **1**.
Change how the BlackBerry Controller restarts the BlackBerry Mail Store Service.	1. Expand **BlackBerry Enterprise Server**. 2. Click **MailStore**. 3. Double-click the DWORD value that is named **RestartOnCrash**. 4. In the **Value data** field, perform one of the following actions: • To prevent the BlackBerry Controller from restarting the BlackBerry Mail Store Service if the service stops responding, type **0**. • To permit the BlackBerry Controller to restart the BlackBerry Mail Store Service if the service stops responding, type **1**.

4.   Click **OK**.

Log files for the BlackBerry Device Service components

You can use log files to record the activity of the BlackBerry Device Service components and troubleshoot issues with the components. The BlackBerry Device Service creates a log file for each component and saves the log files on the computer that hosts the BlackBerry Device Service. By default, the BlackBerry Device Service saves the log files in C:\Program Files (x86)\Research In Motion\BlackBerry Device Service\Logs\. Each BlackBerry Device Service instance saves the log files in folders that it creates daily and organizes by date. To prevent the log files from taking up too much disk space, you can change how BlackBerry Device Service components create and delete log files.

The size of log files varies based on the number of users in your BlackBerry Device Service environment and the level of user activity. It is a best practice to monitor and control the amount of disk space taken up by the BlackBerry Device Service log files.

By default, the BlackBerry Device Service names log files
<server_name>_<component_identifier>_<instance>_<yyyymmdd>_<log_number>.txt (for example,
BBServer01_MDAT_01_20110830_0001.txt). An event that the BlackBerry Device Service writes to a log file begins with a five-digit number, where the first digit represents the logging level. For example, the following log file entry logs level 3: [30000] (03/12 14:03:42.315):{0x18CC} [ENV] Computer Host Name: *host_name*.

With the BlackBerry Device Service, a new log file for the Enterprise Management Web Service has been added.

Change the location for log files

The default file location for BlackBerry Device Service log files is C:\Program Files\Research In Motion\BlackBerry Device Service\Logs\.

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view** > **Logging**.
2. Click the BlackBerry Device Service instance.
3. On the **Instance information** tab, click **Edit instance**.
4. In the **Log file path** field, type the path where you want to save the log files.
5. Click **Save all**.
6. Restart the BlackBerry Device Service

Change the folder for log files

By default, the BlackBerry Device Service stores log files in daily folders that it creates in the Logs folder. You can set the BlackBerry Device Service to store log files in the Logs folder and not in daily folders in the Logs folder.

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view** > **Logging**.
2. Click the BlackBerry Device Service instance.
3. On the **Instance information** tab, click **Edit instance**.
4. In the **General** section, in the **Create folder for daily logs** drop-down list, click **False**.
5. Click **Save all**.
6. Restart the BlackBerry Device Service.

Add a prefix to the file name of a log file

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view** > **Logging**.
2. Click the BlackBerry Device Service instance.
3. On the **Instance information** tab, click **Edit instance**.
4. In the **General** section, in the **Log file prefix** field, type the prefix that you want to add to the log files.
5. Click **Save all**.
6. Restart the affected BlackBerry Device Service services.

Change the maximum size of a log file

You can specify the maximum size for each log file that the BlackBerry Device Service creates. When a log file reaches its maximum size, the BlackBerry Device Service either creates another log file or overwrites the existing one.

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view** > **Logging**.
2. Click the BlackBerry Device Service instance.
3. On the **Logging details** tab, click **Edit instance**.
4. In the **Maximum size of daily log files (MB)** field for the log file, type the file size.
5. Click **Save all**.
6. Restart the affected BlackBerry Device Service services.

Change the logging level of a log file

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view** > **Logging**.
2. Click the BlackBerry Device Service instance.
3. On the **Logging details** tab, click **Edit instance**.
4. In each section, in the **Log level** drop-down list, perform one of the following actions:

   - To write error messages to the log file, click **Error**.
   - To write warning messages and error messages to the log file, click **Warning**.
   - To write daily activities messages, warning messages, and error messages to the log file, click **Informational**.
   - To write all messages to the log file, click **Debug**.

5. Click **Save all**.
6. Restart the affected BlackBerry Device Service services.

Specify how the BlackBerry Device Service manages a log file that reaches its maximum size

When a log file reaches its maximum size, the BlackBerry Device Service either creates another log file or overwrites the existing one. If you turn on log auto-roll, the BlackBerry Device Service creates a new log file. If you turn off log auto-roll, the BlackBerry Device Service overwrites the existing log file. By default, log auto-roll is turned on for a log file.

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view** > **Logging**.
2. Click the BlackBerry Device Service instance.
3. On the **Logging details** tab, click **Edit instance**.
4. In the **Log auto-roll** drop-down list for the log file, click **True**.
5. Click **Save all**.
6. Restart the affected BlackBerry Device Service services.

Change the name of a log file

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view** > **Logging**.
2. Click the BlackBerry Device Service instance.
3. On the **Logging details** tab, click **Edit instance**.
4. In the **Log identifier** field, type a new name.
5. Click **Save all**.
6. Restart the affected BlackBerry Device Service services.

Specify when the BlackBerry Device Service creates a log file

You can specify when the BlackBerry Device Service creates a log file. If you set the Daily file creation field to True, the BlackBerry Device Service creates a new log file every day. If you set the Daily file creation field to False, the BlackBerry Device Service creates a new log file only when the existing log file reaches it maximum size.

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view** > **Logging**.
2. Click the BlackBerry Device Service instance.
3. On the **Logging details** tab, click **Edit instance**.
4. In the **Daily file creation** drop-down list, click **False**.
5. Click **Save all**.
6. Restart the affected BlackBerry Device Service services.

Set the maximum age for a log file

When you set the maximum age for a log file, the BlackBerry Device Service deletes the log file when it reaches that age.

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view** > **Logging**.
2. Click the BlackBerry Device Service instance.
3. On the **Logging details** tab, click **Edit instance**.
4. In the **Maximum age of daily log files** field for the log file, type the maximum age in days for the log file.
5. Click **Save all**.
6. Restart the affected BlackBerry Device Service services.

Change the encoding of the log file

You can change the character encoding system that the BlackBerry Device Service uses for log files so that the log files support the tools that you use to parse and examine the log files. You can specify a different character encoding system for each of the log files.

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view** > **Logging**.
2. Click the BlackBerry Device Service instance.
3. On the **Logging details** tab, click **Edit instance**.
4. In the **Log encoding** drop-down list, click one of the following character encoding systems:

   - **ANSI**
   - **UTF-8**
   - **UTF-16LE**
5. Click **Save all**.
6. Restart the affected BlackBerry Device Service services.

Restore default settings for log files

1. In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology** > **BlackBerry Domain** > **Component view** > **Logging**.
2. Click the BlackBerry Device Service instance.
3. On the **Logging details** tab, click **Edit instance**.
4. Click **Reset logging defaults**.
5. Click **Save all**.
6. Restart the BlackBerry Device Service.

Monitoring devices

Log files for tablets

You can configure a BlackBerry PlayBook tablet to submit log files to the BlackBerry Technical Solution Center. You can use the Log Submission IT policy rule in the BlackBerry Device Service to control whether the tablet submits log files. If the tablet is paired with a BlackBerry smartphone, the BlackBerry PlayBook Log Submission IT policy rule in the BlackBerry Enterprise Server also affects whether the tablet submits log files.

The following table shows how the log submission IT policy rules in the BlackBerry Device Service and the BlackBerry Enterprise Server affect whether a tablet that is paired with a smartphone submits log files to the BlackBerry Technical Solution Center.

Log Submission IT policy rule - BlackBerry Device Service	BlackBerry PlayBook Log Submission rule IT policy rule - BlackBerry Enterprise Server	Result
Enable	Enable	The tablet sends log files
Disable	Enable	The tablet does not send log files
Enable	Disable	The tablet does not send log files
Disable	Disable	The tablet does not send logs files

Glossary

ANSI	American National Standards Institute
BlackBerry CAL	A BlackBerry® Client Access License (BlackBerry CAL) limits how many users you can add to a BlackBerry® Enterprise Server.
EAP-FAST	Extensible Authentication Protocol Flexible Authentication via Secure Tunneling
EAP-TTLS	Extensible Authentication Protocol Tunneled Transport Layer Security
FQDN	fully qualified domain name
GPO	Group Policy Object
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol over Secure Sockets Layer
IPsec	Internet Protocol Security
PIN	personal identification number
PSK	pre-shared key
SCEP	simple certificate enrollment protocol
SRP	Server Routing Protocol
SSL	Secure Sockets Layer
TCP	Transmission Control Protocol
TLS	Transport Layer Security
UNC	Universal Naming Convention
UTF-8	8-bit UCS/Unicode Transformation Format
UTF-16LE	UCS Transformation Format 16 Little Endian
VPN	virtual private network
WEP	Wired Equivalent Privacy
WPA	Wi-Fi Protected Access

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