ServiceNow Application Developer

Securing Applications Against Access from Other Applications > Exercise: Application Access

In this exercise, you will create an application and attempt to access *NeedIt* records by script from the new application.

Set Application Access on the NeedIt Table

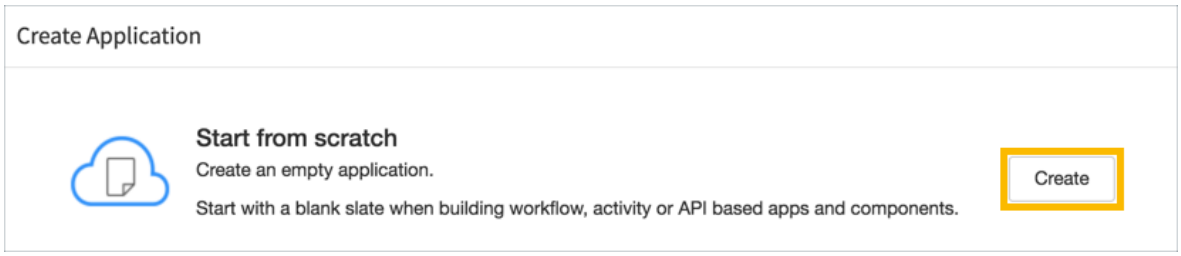
1. If the *NeedIt* application is not open in Studio from the last exercise, open it now.
2. In the main ServiceNow browser window use the Application Navigator to open **System Applications > Studio**.
3. In the *Select Application* dialog, click the **NeedIt** application.
4. Use the Application Explorer to open **Data Model > Table > NeedIt**.
5. Switch to the **Application Access** section (tab).
6. Change the *Accessible from* value to **This application scope only**.
7. Click the **Update** button.

Create the Untrustworthy Application

1. Open a second Studio window. In the main ServiceNow browser window use the Application Navigator to open **System Applications > Studio**.

2. Click the **Create Application** button in the *Select Application* dialog.

3. Click the **Create** button for the *Start from scratch* option in the *Create Application* dialog.



4. Configure the application:

   Name: **Untrustworthy Application**

   Scope: **(this value is automatically populated)**

5. Click the **Create** button in the *Create Application* dialog.

6. Click the **OK** button in the *Confirm Application* dialog.

7. When you see the *Success* message, click the **Switch to application** button.

8. Do not add any application files to the *Untrustworthy Application* (they are not needed for testing Application Access).

Test NeedIt Application Access

In this part of the exercise, you will use the ***Scripts - Background*** **(https://developer.servicenow.com/blog.do?p=/post/training-scriptsbg/)** module to test *NeedIt* Application Access. *Scripts - Background* runs server-side JavaScript on demand. This module should be used with caution because scripts with bad logic can make unintended changes or deletions in the database. System administrators can configure their instances to require the *security_admin* role to use *Scripts - Background*.

1. In the main ServiceNow browser window, use the Application Navigator to open **System Definition > Scripts - Background**.

2. Copy this script and paste it into the *Run script* field:

```
// Create a GlideRecord object for the NeedIt table
var gr = new GlideRecord('<table_name>');
// Query the database and return all the NeedIt records
gr.query();
// Iterate through the NeedIt records.  Set the Priority to Critical
// Update the NeedIt record in the database
while(gr.next()){
    gr.priority = 1;
    gr.update();
}
```

3. Copy the *NeedIt* table *Name*.

   a. Switch to the Studio tab where the *NeedIt* application is open for editing.

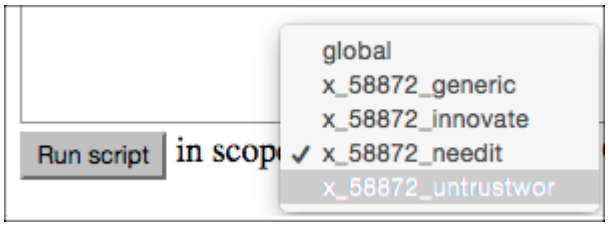
   b. Switch to the *NeedIt* table tab. If the *NeedIt* table tab was closed, use the Application Explorer to open **Data Model > Table > NeedIt**.

   c. Copy the value in the *Name* field.

4. Return to the main ServiceNow browser window and edit the script in *Scripts - Background*. Replace **<table_name>** in line 2 with the name of the *NeedIt* table. Keep the " marks but do not keep the <>.

5. Examine the script to see what it does.

6. Set the script to run in the *Untrustworthy Application* scope. (Your scope name may be different than the scope in the image.)



7. Click the **Run script** button to execute the script.

▶ **QUESTION**: Was the script from the *Untrustworthy Application* scope able to read and update the *NeedIt* table records?

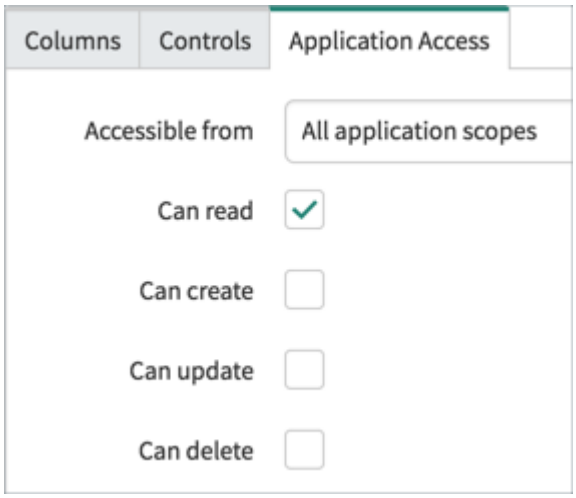
Modify NeedIt Table Application Access

1. Return to the Studio window for the *NeedIt* application.

2. If the *NeedIt* table tab is not still open, use the Application Explorer to open **Data Model > Table > NeedIt**.

3. Switch to the **Application Access** section (tab).

4. Change the *Accessible from* value to **All application scopes** and click the **Can read** option.



5. Click the **Update** button.

Test NeedIt Application Access Again

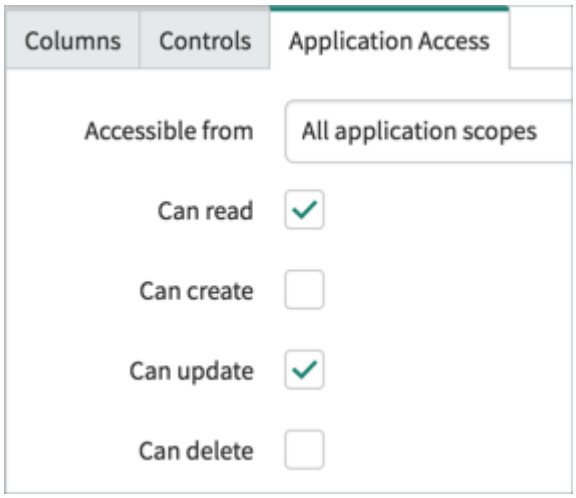
1. Return to the main ServiceNow browser window where *Scripts - Background* is open. Click the browser's **Back** button to return to the page with the script.
2. Verify that the script is still set to run in the *Untrustworthy Application* Scope.
3. Click the **Run script** button to execute the script.

▶ **QUESTION**: On the second try, was the script from the *Untrustworthy Application* able to read and update the *NeedIt* table records?

Modify NeedIt Table Application Access Again

1. Return to the Studio window for the *NeedIt* application.
2. If the *NeedIt* table tab is not still open, use the Application Explorer to open **Data Model > Table > NeedIt**.
3. Switch to the **Application Access** section (tab).

4. Add **Can update** to the permissions.



5. Click the **Update** button.

Test NeedIt Application Access a Third Time

1. Return to the main ServiceNow browser window where *Scripts - Background* is open. Click the browser's **Back** button to return to the page with the script.
2. Verify that the script is still set to run in the *Untrustworthy Application* Scope.
3. Click the **Run script** button to execute the script. If you see messages about before query Business Rules, ignore them.

▶ **QUESTION**: On the third try, was the script from the *Untrustworthy Application* able to read and update the *NeedIt* table records?

▶ **QUESTION**: If the script fails, review the error message. What was the cause of the error?