Relationship Type Count Trigger

About

This SQL trigger is used to update a custom field with the number of “Installed On” that are related for a given CI (see relationship tab for a CI). The trigger is executed when new records are inserted into the CG\_ManagedResourceLink table or when records are updated in this table. In addition, these database transactions occur when related CIs are added or modified for a given CI and when those changes are committed to the database via the Save button in the CI form window.

Implementation

1. Execute the SQL trigger script below against the customer’s ChangeGear database
2. Create a generic UDF string field called 'MyCustomField' in the CMDB module.
   1. **Note:** this field can be called anything but this line in the SQL should be updated with the correct field name if a different field name is used:

SET UDF\_MyCustomField = CAST(@installed\_on\_count as varchar(max))

1. Add the UDF field to your form(s)

Testing

1. In ChangeGear Web, modify CIs in the CMDB module. you can do this by updating the description field and clicking save.
2. Then run this script (which is from the SQL trigger script below)

SELECT OID FROM CG\_ManagedResource

WHERE LastModifiedDateTime > DATEADD(minute, -10, GETDATE())

1. This will show CIs that were last modified in the last 10 minutes.
2. Open up one the CIs that have related CIs attached to them but ones that are under the Installed On relationship (so CIs that are installed on the CI question). These CIs should be the ones that you modified earlier.
3. Check what the field value is for the custom field that you have added for this.
   1. **Note:** The field should exist in the **CG\_MangedResource** table for this to work.
4. **Note:** If you want to update legacy CIs that haven’t been modified recently then you should run the Cursor script which starts after the outermost BEGIN statement and ends before the outermost END statement in the script for this. This WHERE clause should also be removed from the script so it will update all of the CIs.

WHERE LastModifiedDateTime > DATEADD(minute, -10, GETDATE())

1. Edit one of the related CIs by changing its relationship type. For example, if the installed on count in the custom field displays “4” then changing a CI to be a “connected to” relationship for the CI from “Installed On” will make the count display 3.
2. Save your changes in the CI form window. This will execute the database trigger.

Troubleshooting

1. This SQL script will show you which records the script will touch:

SELECT OID FROM CG\_ManagedResource

WHERE LastModifiedDateTime > DATEADD(minute, -10, GETDATE())

1. Make sure the column for the custom field that was created for this exists in the CG\_MangedResource table.