

The NVTGC field in OCLC ILLiad

NVTGC originally stood for the Northern Virginia Tech Graduate Center. This field was originally a Yes/No field that marked if a customer at Virginia Tech was associated with this branch campus. If Yes, the items would be flagged and marked for shipment to the remote pickup location. No ILL processing is done at the VT Grad Center. As the remote pickup locations expanded at Tech (VET for the Vet library, ART for the Art/Architecture library) the field changed from a Yes/No field to a text field with three letter codes. This still was only for marking pickup locations, but the codes allowed for customized email templates and Word docs.

When Cornell University explained their desire for one ILLiad server for their five libraries to share, we expanded the use of the NVTGC field into the Shared Server Support that it is today. More and more fields have been split out by NVTGC over the years and in a Shared Server environment, the NVTGC field means not only a pickup location, but a processing site. The Virginia Tech method still works in its original form, but the NVTGC field has grown over the years into much more than its simple beginnings.

Changing that field name would be insanely complicated to do in a production system. So for now, it's just stayed NVTGC. One day, in ILLiad version 8 or 9, we'll perhaps change the name.

Tables that contain the NVTGC field

BorrowerStatus	LendingReasonsForCond
ConnectorSessions	LocalInfo
CustomQueues	PrintSessions
Customization	QueueSort
DocDelNotFoundReasons	ReasonsForCancellation
EMailImport	Staff
EMailRouting	Transactions (OriginalNVTGC, BorrowerNVTGC)
Groups	Users
ImportValidation	WorkFormMapping
LenderAddresses	ZSearches
LenderPriorities	ZServerConfig
LendingReasonsForCancellation	

The NVTGC field is used for different reasons in each of the four ILLiad system configurations that we'll discuss below. The options for ILLiad are Single Server, Single Server with Delivery Locations, Shared Server and Shared Server with Delivery Locations.

Single Server

The NVTGC field is largely ignored in a single server environment where there are no other pickup locations. For Borrowing and Document Delivery functions, the NVTGC field is ILL and usually hidden from the customer's view. For Lending functions, the NVTGC is Lending, matching to the username for all Lending requests. Even if the site has no delivery locations and the actual pickup location would be circulation etc, the NVTGC field must be ILL. The field cannot be blank or removed from the registration and change user forms without being replaced with a hidden web field.

To remove the ILL drop down from the NewUserRegistration.html and ChangeUserInformation.html pages, replace the following html code

```
<tr>
  <td align="center"><font size="1">CGIFN=^VARERRORNVTGC^ </font>
</td>
  <td>Delivery Location</td>
  <td><select name="NVTGC" size="1">
    <option selected>CGIFN=^VARNVTGC^</option>
    <option value="ILL">ILL Office</option>
  </select></td>
</tr>
```

with

```
<input type="hidden" name="NVTGC" value="ILL">
```

Single Server with multiple Delivery Locations

As mentioned in Virginia Tech's situation, a single server can have the option of adding delivery locations for the customer to choose. Installations should make an effort to make these delivery location codes short (3-8 characters) and fairly identifiable. All ILL processing is still done under site, but you can customize the emails that customers receive and their Word docs. The Lending module does not change from a standard single server install and all lending requests have a username of Lending.

Note that in this situation you want to use the NVTGC field instead of some other field in the Users table, like Site or Organization. While you could still print and filter based off of those values, you could not customize the info sent out to OCLC, any LocalInfo contact values or notification emails. The NVTGC field was originally designed for this purpose.

The only tables that must change when adding delivery locations are Customization, ImportValidation (if applicable), LocalInfo, Users and WorkFormMapping.

Customization

You do not need to replicate the entire table for each delivery location, but only create new keys for each delivery location for notification. You can use this script to add the entries, replacing the ABC at the beginning of each key with the appropriate pickup location code. You do not need to change the NVTGC field for these entries, so after editing the table all of the NVTGC values in Customization would still be ILL.

```
insert into Customization values
('ABCArticleDeliveryNotifyEMailFileName',
'illartdel.txt','ILL','','Borrowing','EMail','StringValue')
go
insert into Customization values
('ABCArticleDeliveryNotifyEMailSubject',
'Requested article has been
mailed','ILL','','Borrowing','EMail','StringValue')
go
insert into Customization values
('ABCArticleNotifyEMailFileName',
'illart.txt','ILL','','Borrowing','EMail','StringValue')
go
insert into Customization values
('ABCArticleNotifyEMailSubject',
'Requested article has
arrived','ILL','','Borrowing','EMail','StringValue')
go
insert into Customization values
('ABCDDArticleDeliveryNotifyEMailFileName',
'illddartdel.txt','ILL','','Doc Del','EMail','StringValue')
go
insert into Customization values
('ABCDDArticleDeliveryNotifyEMailSubject',
'Requested article has been mailed','ILL','','Doc
Del','EMail','StringValue')
go
insert into Customization values
('ABCDDArticleNotifyEMailFileName',
'illddart.txt','ILL','','Doc Del','EMail','StringValue')
go
insert into Customization values
('ABCDDArticleNotifyEMailSubject',
'Requested article has arrived','ILL','','Doc
Del','EMail','StringValue')
go
insert into Customization values
('ABCDDLoanDeliveryNotifyEMailSubject',
'Requested loan has arrived','ILL','','Doc Del','EMail','StringValue')
go
insert into Customization values
('ABCDDLoanDeliveryNotifyEMailFileName',
'illddloan.txt','ILL','','Doc Del','EMail','StringValue')
go
insert into Customization values
('ABCDDLoanNotifyEMailFileName',
'illddloan.txt','ILL','','Doc Del','EMail','StringValue')
go
```

```

insert into Customization values
('ABCDDLoanNotifyEMailSubject',
'Requested Loan has arrived','ILL','','Doc Del','EMail','StringValue')
go
insert into Customization values
('ABCLoanDeliveryNotifyEMailFileName',
'illloandel.txt','ILL','','Borrowing','EMail','StringValue')
go
insert into Customization values
('ABCLoanDeliveryNotifyEMailSubject',
'Requested Loan Mailed','ILL','','Borrowing','EMail','StringValue')
go
insert into Customization values
('ABCLoanNotifyEMailFileName',
'illloan.txt','ILL','','Borrowing','EMail','StringValue')
go
insert into Customization values
('ABCLoanNotifyEMailSubject',
'Requested loan has
arrived','ILL','','Borrowing','EMail','StringValue')
go
insert into Customization values
('ABCMDNotifyEMailFileName',
'ddmnotify.txt','ILL','','Doc Del','EMail','StringValue')
go
insert into Customization values
('ABCMDNotifyEMailSubject',
'Requested Items Processed','ILL','','Doc Del','EMail','StringValue')
go
insert into Customization values
('ABCMDThreshold',
'500','ILL','','Doc Del','EMail','StringValue')
go
insert into Customization values
('ABCMNotifyEMailFileName',
'illmnotify.txt','ILL','','Borrowing','EMail','StringValue')
go
insert into Customization values
('ABCMNotifyEMailSubject',
'Requested items processed','ILL','','Borrowing','EMail','StringValue')
go
insert into Customization values
('ABCMThreshold',
'500','ILL','','Borrowing','EMail','StringValue')
go

```

ImportValidation

If the site is comparing users to those in the ImportValidation table (ImportValidation set to Lookup), they would need to update the NVTGC field in that table to reflect any pickup locations that a customer may have now instead of ILL.

LocalInfo

Entries need to be added for each pickup location. This will customize the Word documents with contact information for that site. If these entries are missing, then certain aspects of ILLiad will show as blank or give errors.

Users

Obviously, any users who choose those pickup locations would need to change their values in the Users table. The site just needs to add the option to the web pages. It should be a drop down instead of an edit box. An example of the html is:

```
<tr>
  <td align="center"><font
size="1">CGIFN=^VARERRORNVTGC^</font></td>
  <td>Delivery Location</td>
  <td><select name="NVTGC" size="1">
  <option selected>CGIFN=^VARNVTGC^</option>
  <option value="ILL"> ILL Office</option>
  <option value="ABC">ABC Branch Pickup</option>
  <option value="XYZ">XYZ Branch Pickup</option>
  </select></td>
</tr>
```

WorkFormMapping

Entries need to be replicated for each site in the WorkFormMapping table. The easiest way to do this is to run a SQL script:

```
insert into WorkFormMapping
select 'ABC', WorkFormType, OCLCFieldName, ILLiadFields
from WorkFormMapping where NVTGC = 'ILL'
go
```

This script takes all the ILL entries and re-enters them with an NVTGC of ABC.

Shared Server

If a site has decided to become shared server, they can add sites to their server and each work independently on the same server and database, using views of tables in ILLData.

Remember that becoming shared server or adding sites to a server that is already a shared server is a sales issue as well, in that the sites must pay extra in their yearly license. Also, adding sites has been an Atlas issue in that it is a modification to the installation. But these are the changes that are made.

Shared Server Tool

Atlas has a shared server tool that we use to convert sites from single to shared server or to add sites. This is a screen shot of the form.

Shared Server Setup

Enter Site Codes Here:

APPLE
CHERRY
PEAR

Add Site

Start

Steps To Be Performed:

- Rename Users to UsersALL
- Create ILLiad User View
- Create SQL Login for User
- Add Database User
- Grant Site User View Permission
- Add Database Permissions For User
- Add Customization Keys for Each Site
- Add Custom Queues
- Add WorkFormMapping Entries
- Add User Accounts to UsersALL
- Add View for Site
- Add Delivery Locations
- Make Copy of Web Pages For Each Site
- Add Doc Del Reasons Not Found for Site
- Add Lending Reasons For Cancellation for Site
- Add Lending Reasons For Conditionalization for Site
- Add Borrowing Reasons For Cancellation for Site
- Add Library Addresses for Site (Required)

Activity Log (also in SSSSetupLog.txt file)

The list of steps is a good review of all the changes that happen when converting from Single to Shared Server. In the tool, we type in the names of the codes and then hit Start to run the conversion. If later we have to add another site to a shared server installation, we can uncheck the items that have already been done (rename Users to UsersALL) and only do the steps for that specific site code. So for the purposes of our demonstration, we're going to setup a library in a fruit orchard consortium. Apple, Cherry, and Pear are the sites that we're adding.

Users and Shared Server Installs

When changing from a single server to a shared server install, the Users table is renamed to UsersALL. Each site then has a view of that table called Users. Since the ILLiad components only reference it as Users, it looks at the filtered view instead of the entire table of all users in the UsersALL table. The views are created by SQL scripts like these:

```
create view [APPLE].Users
as select * from UsersALL where NVTGC = 'APPLE'
go
```

All of the functions in ILLiad reference the Users table (i.e. searching on Transactions and Users where the usernames match so it would only show you transactions that had usernames in the Users view).

LenderAddresses and Shared Server Installs

At one point, we were allowing sites to choose if they wanted their LenderAddresses table split out for each site. We have since decided to split out all shared server sites by default for most sites

Much like the Users table, in a Shared Server installation, the LenderAddresses table is changed to LenderAddressesALL and a view is assigned to each site. The addresses in the table are duplicated for each site via the shared server tool. Any new addresses added by a site are only used by that site and the other sites can not see them. The query to create the LenderAddresses view looks like this:

```
create view [APPLE].LenderAddresses
as select * from LenderAddressesALL where NVTGC = 'APPLE'
go
```

Note that because splitting out the LenderAddresses table was optional at one point, there is a key in the Customization table that marks whether the server has a LenderAddressesALL table. That key – SSSLenderAddressesALL – should be set to Yes if the table is called LenderAddressesALL and No if it is called LenderAddresses. The key is particularly relevant when servers are updated as most of the update scripts reference this key to know which table to attempt to modify.

The ILLiad View and Shared Server Installs

With a Shared Server installation, the illiad SQL login/user still exists and is used for web reports, some web pages and general connections for other tools. The Users view and LenderAddresses view for illiad looks like:

```
create view [illiad].Users
as select * from UsersALL
go

create view [illiad].LenderAddresses
as select * from LenderAddressesALL
go
```

These views must exist in order for all aspects of ILLiad to function.

System Users and Shared Server Install

If a site is installed as a shared server, user records are added to the UsersALL table for each site code. In our example, there would be users called APPLE, CHERRY and PEAR each with the same NVTGC field as the username. These users are necessary for reports, templates, routing and other functions to work. Sometimes an institution will

delete these users accidentally and they need to be put back. These users are only necessary if the server is a shared server installation. An easy script to use to replace the user record is:

```
insert into UsersALL
(Username, FirstName, LastName, SSN, Status, Department, NVTGC)
values
('APPLE', 'APPLE', 'APPLE', '123123123', 'None', 'None', 'APPLE')
go
```

Lending in Shared Server Installs

When a site is a shared server installation, the incoming Lending requests are split out by username. Instead of the username being “Lending” as in a single server installation, the username for lending requests matches the site code for that request – “APPLE”, “CHERRY” or “PEAR”. Any NVTGC values that used to say Lending, are now going to be duplicated for each site. So for example, the LendingReasonsForCancellation table would have entries for APPLE, CHERRY and PEAR and any entries for Lending would be ignored. These tables must be split out for each site and are done so by default during the shared server installation.

Web Pages and Shared Server Installs

Shared Servers also have the option of splitting out their web pages for each site code in the database. By default the shared server tool splits out the pages to give sites the option of using their own. But not all shared server sites have separate web pages.

For sites to have their own set of web pages, two hidden fields must exist on every ILLiad web page:

```
<input type="hidden" name="LogonPath"
value="c:\inetpub\wwwroot\illiad\APPLE">
<input type="hidden" name="NVTGC" value="APPLE">
```

Also each web folder must have a logon.txt file with the same username and password in it that is used for the client. Note that the LogonPath would need to be updated to reflect the actual location of the web pages and DLL for that site. The LogonPath actually tells the DLL where the logon.txt file lives so that it knows how to connect to the database. After that, when it queries for the WebPath, it will grab the value that corresponds to the correct NVTGC. That then tells the DLL where the web page is located to display.

If a shared server installation is using only one set of web pages, then the WebPath values would all be the same and there is no need for the hidden fields. The New User Registration and Change User Information pages would have drop downs asking the customer to choose a site code.

[Shared Server with Multiple Delivery Locations](#)

The most complicated of all these setups is a Shared Server installation in which one or more of the processing locations have multiple delivery or pickup locations. In our fruit orchard example, we will say that the APPLE University has branch (hehe) pickup locations of FUJI, GALA and GRANNY, while CHERRY and PEAR are still their own processing units.

CHERRY and PEAR would not change as far as their Shared Server installations. But several things would change for APPLE and some values would need to be added for FUJI, GALA and GRANNY.

Imagine this as a combination of the Single Server with Delivery Locations installation and the Shared Server installation. The server would first be set up as a shared server for APPLE, CHERRY and PEAR, as in the previous section.

Next, the APPLE site would need to have some entries added to the same tables that change for a single server with multiple delivery locations: Customization, ImportValidation (if applicable), LocalInfo, Users and WorkFormMapping.

Customization

The same entries from above must be added into the Customization table, only now it's for FUJI, GALA and GRANNY. You can use the same script from above, only change the ILL NVTGC to be APPLE and replace the ABC with FUJI, etc. Here's an example:

```
insert into Customization values
('FUJIArticleDeliveryNotifyEMailFileName',
'illartdel.txt','APPLE','','Borrowing','EMail','StringValue')
go
```

In addition to adding those tags, you will also need a separate listing for each of these delivery locations for the WebPath key. So a script to add those in this example would be:

```
insert into Customization values
('WebPath','c:\inetpub\wwwroot\illiad\APPLE\','FUJI',
'Web Path','Web Interface','Defaults','StringValue')
go
insert into Customization values
('WebPath','c:\inetpub\wwwroot\illiad\APPLE\','GALA',
'Web Path','Web Interface','Defaults','StringValue')
go
insert into Customization values
('WebPath','c:\inetpub\wwwroot\illiad\APPLE\','GRANNY',
'Web Path','Web Interface','Defaults','StringValue')
go
```

Note that the web path value is the same (c:\inetpub\wwwroot\illiad\APPLE\) for each of these entries.

ImportValidation

The user records in the ImportValidation table would need their NVTGC fields to be FUJI, GALA or GRANNY in addition to the APPLE, CHERRY or PEAR values. Again, this only applies if the site is using ImportValidation with a setting of Lookup.

LocalInfo

The LocalInfo table would need entries for each of the new delivery locations. So all of the listings in that table would be:

APPLE
CHERRY
FUJI
GALA
GRANNY
PEAR

The values of ILL or Lending would no longer be used, but can be left there as they're not doing any harm.

Users

The list of valid NVTGC values in the Users table would expand to be the same list as in LocalInfo above (APPLE, CHERRY, FUJI, GALA, GRANNY, PEAR). ILL would not be a valid NVTGC value for any user in the system.

WorkFormMapping

Entries would need to be added for each of the APPLE delivery locations using the same values that are for APPLE as a guide. You can use the same script from earlier in this document and replace ILL with APPLE and ABC with FUJI etc. An example is:

```
insert into WorkFormMapping
select 'FUJI', WorkFormType, OCLCFieldName, ILLiadFields
from WorkFormMapping where NVTGC = 'APPLE'
go
```

UsersALL View in a Shared Server with Delivery Locations

The views for CHERRY and PEAR would not change with the addition of these three additional pickup locations to APPLE University. But the view for APPLE.Users would change so that it would see any of those users. There are two different ways to write the view.

```
create view [APPLE].Users as
select * from UsersALL where NVTGC in ('APPLE','FUJI','GALA','GRANNY')
go
```

or

```
create view [APPLE].Users as
select * from UsersALL where NVTGC not in ('CHERRY', 'PEAR')
go
```

The first script says that the view is of all users who have an NVTGC of APPLE, FUJI, GALA or GRANNY. The second script marks users who are anything *except* CHERRY or PEAR. Either would be fine; the difference is only the ease of reading the view and understanding it later.

The view for LenderAddresses would not need to change.

Web Pages in a Shared Server with Delivery Locations

The APPLE web pages will continue to work as before. The only difference is that on the NewUserRegistration.html and ChangeUserInformation.html pages, you would need to remove the hidden field for NVTGC and replace it with a drop down allowing the customer to choose their NVTGC value. A sample of the html would be:

```
<tr>
  <td align="center"><font
size="1">CGIFN=^VARERRORNVTGC^</font></td>
  <td>Delivery Location</td>
  <td><select name="NVTGC" size="1">
    <option selected>CGIFN=^VARNVTGC^</option>
    <option value="APPLE">APPLE University ILL Office</option>
    <option value="FUJI">FUJI Branch ILL Office</option>
    <option value="GALA">GALA Branch ILL Office</option>
    <option value="GRANNY">GRANNY Branch ILL Office</option>
  </select></td>
</tr>
```