



GRIN-Global – Administrator Webinar

Session 4 Topics:

Table Mapping
Languages (& Friendly Names)
Codes & Code Groups
Import Wizard
Searches

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instructor

Review

- Questions regarding any topics covered in the Previous Sessions
 - ???
 - Data view editing???
 - Table mapping???

Use case: Import a dataview for a Wizard

The image shows a screenshot of the 'Global Project' website. The top navigation bar is green with white text for the following items: 'al', 'GG Sites', 'Release Notes', 'Documentation', 'Training', and 'Resources'. The 'Resources' dropdown menu is open, displaying a list of links. A yellow arrow points to 'Genesys FAQs'. The 'GitLab Source Files' link is circled in black. Below the navigation bar, the text 'Global Project' is visible, followed by a world map with location pins. A blue pin in the bottom left corner is labeled 'Evaluating'.

- al
- GG Sites
- Release Notes
- Documentation
- Training
- Resources
 - International GG Help Desk
 - Crop Trust
 - Genesys
 - Genesys FAQs
 - Files
 - Codes (Values & Descriptions)
 - Dynamic Folder Examples
 - GitLab Source Files
 - Logos (GRIN-Global)

Global Project

Evaluating



Wizards

Group ID: 2522294

















This repository has the wizards developed by GRIN-Global community

Subgroups and projects

Shared projects

Archived projects

Search by name

- | | | | |
|---|---|--|---|
|  |  | AttachmentWizard  |  0 |
| GRIN-Global wizard to upload files to GRIN-Global server by accession. Tested with Cur... | | | |
|  |  | EASY-SMTA  |  0 |
| The EASY-SMTA wizard support the publishing of order request data to Multilateral Syst... | | | |
|  |  | GLIS-DOI  |  0 |
| Request DOI value to GLIS from GRIN-Global | | | |
|  |  | GRIN-Global-Genesys  |  1 |
| GRIN-Global-Genesys wizard allow to push the passport data available in GRIN-Global t... | | | |

How to install the Genesys Wizard for Curator Tool

1. Download the files: "GenesysWizard.dll", "GeneSys2.Client.dll", "Newtonsoft.Json.dll" and "stdole.dll" from [here](#).
2. Unblock the DLLs files. Right click the DLL file, select properties and check "Unblock"
3. Copy the file "GenesysWizard.dll" to "C:\Program Files\GRIN-Global\GRIN-Global Curator Tool\Wizards" folder.
4. Copy the files "GeneSys2.Client.dll", "Newtonsoft.Json.dll" and "stdole.dll" to "C:\Program Files\GRIN-Global\GRIN-Global Curator Tool" folder.
5. Run Curator Tool.

Importing the get_passport_dataview

Don't forget to import the dataview **get_passport_data** through GRIN-Global Admin-Tool, the dataview get_pasport_data is available [here](#)

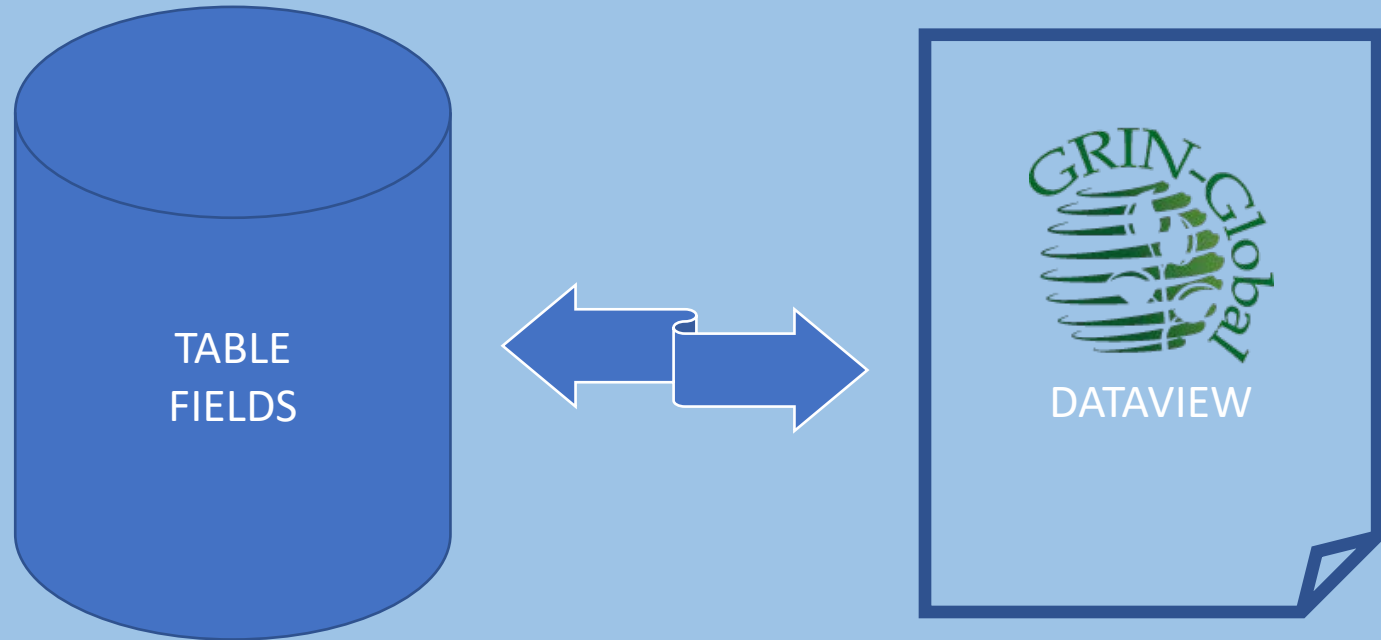
When must you do Table Mappings?

Table Mapping

- You must map when there is a schema change - whenever there is a change with database fields and/or tables
- Coordinates the database with GRIN-Global

Table Mapping

Relates database *table* names to
dataview *friendly* names



Guidelines for New Tables

To work correctly with the CT & Middle Tier (MT) :

- The first field needs to be an integer PK with the name [table]_id.
ex: accession_id
- To function properly, the MT must have 6 standard control fields:
 - created_by, created_date
 - modified_by, modified_date
 - owned_by, owned_date

New Tables in GG

Recommended:

Avoid adding tables to the GG schema – check with others first! (A table /field may already exist)

If you do create a new table, use an existing GG table as the template

Note: Date fields need to be declared datetime2

New Tables

1. Use SSMS to create a script from an existing GG table to get a template for creating a new table

Example on next slide (**genetic_marker**)

Alter the table name (in green) and replace the fields in the middle, but leave the final six (in yellow) as in (next 2 slides)

2. Map the new table in the AT

```
CREATE TABLE [dbo].[genetic_marker](  
[genetic_marker_id] [int] IDENTITY(1,1) NOT NULL,  
[crop_id] [int] NOT NULL,  
[name] [nvarchar](100) NOT NULL,  
[synonyms] [nvarchar](200) NULL,  
[repeat_motif] [nvarchar](100) NULL,  
[primers] [nvarchar](200) NULL,  
[assay_conditions] [nvarchar](4000) NULL,  
[range_products] [nvarchar](60) NULL,  
[genbank_number] [nvarchar](20) NULL,  
[known_standards] [nvarchar](max) NULL,  
[map_location] [nvarchar](100) NULL,  
[position] [nvarchar](1000) NULL,  
[poly_type_code] [nvarchar](20) NULL,  
[note] [nvarchar](max) NULL,
```

```
[created_date] [datetime2](7) NOT NULL,  
[created_by] [int] NOT NULL,  
[modified_date] [datetime2](7) NULL,  
[modified_by] [int] NULL,  
[owned_date] [datetime2](7) NOT NULL,  
[owned_by] [int] NOT NULL,  
CONSTRAINT [PK_genetic_marker] PRIMARY KEY CLUSTERED  
(  
[genetic_marker_id] ASC  
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF,  
IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS = ON,  
ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]  
) ON [PRIMARY] TEXTIMAGE_ON [PRIMARY]  
GO
```

Steps in Mapping a DB *Field* to a Dataview

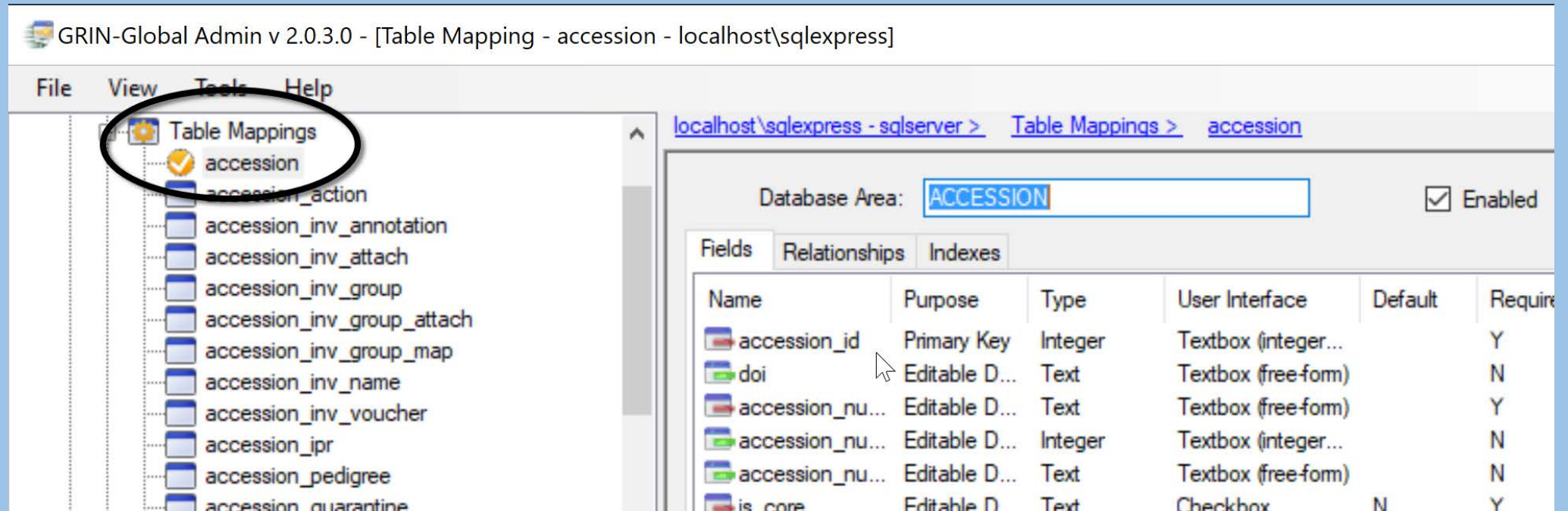
1. Create the field in the database (use SSMS)

Example:

```
USE gringlobal
ALTER TABLE dbo.accession
ADD noteURL nVARCHAR(max) NULL
;
```

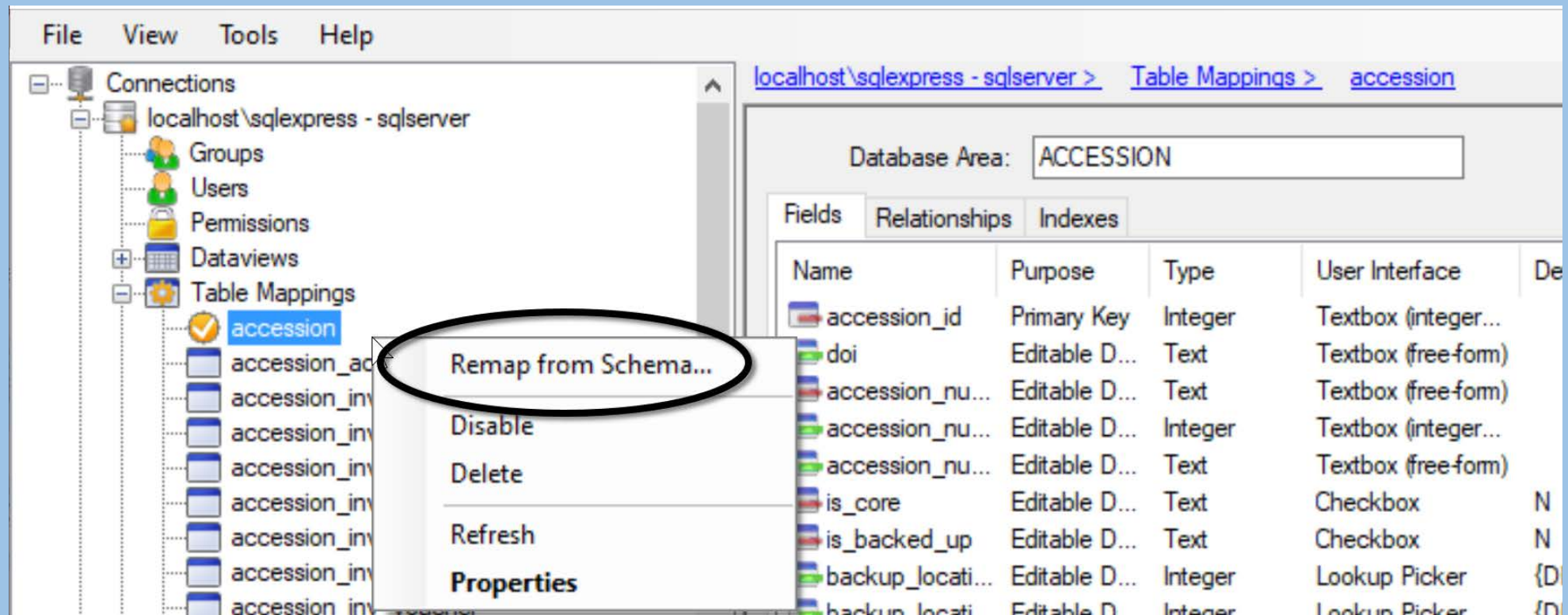
Steps in Mapping a DB *Field* to a Dataview

2. In the AT, select the table in Table Mappings



Steps in Mapping a DB *Field* to a Dataview

3. Right-click on the table name; select **Remap from Schema**




Steps in Mapping a DB *Field* to a Dataview

4. Select **Generate Default Mappings**

Schema Inspection Results

Rebuild mappings for table(s)...

☐ Show All Tables ☐ Select All

Table Name	
<input checked="" type="checkbox"/>  accession	

Generate Default Mappings Cancel

Steps in Mapping a DB *Field* to a Dataview

5. Edit Titles & Descriptions; ...other options as needed

Table Mapping Field Detail

Name: **noteurl** < >

☐ Is Primary Key ☐ Is Auto Incremented ☐ Auto-save on move

☐ Is Foreign Key

Foreign Key Detail

Field:

☐ Is Required ☐ Is Read Only

Purpose: Editable Data Min Length: Max Length:

Type: Text 0 -1 ☐ Unlimited

Default Value: {DBNull.Value} ☒ Empty Default Value

User Interface: Textbox (free-form)

Display Text:

	Language	Title	Description
	Český		
	ENG		
	English	URL	Accepts html code for URL
	Español		
	Français		
	Português		

Save Cancel

In Table Mapping, the Titles and Descriptions here establish the *default* friendly heading names

Friendly Heading Names

- The **Title** on the **Table Mapping Field Detail** window is the default friendly name

accession_number_part1 = Accession Prefix

(also referred to as the “*table field* friendly heading name”)

Friendly Heading Names

...can be defined at 2 Levels...

the 2nd way, using the AT dataview editor, a GG admin can rename any field heading for a *specific* dataview

... this does not change the friendly heading name for other dataviews; it simply becomes the friendly name for the dataview being edited

The default (Table Field) *friendly names*

Accessions

NEW Acc Dataview

Inventory

Orders

Cooperators

Get Site

Get Sys Dataview Field Lang

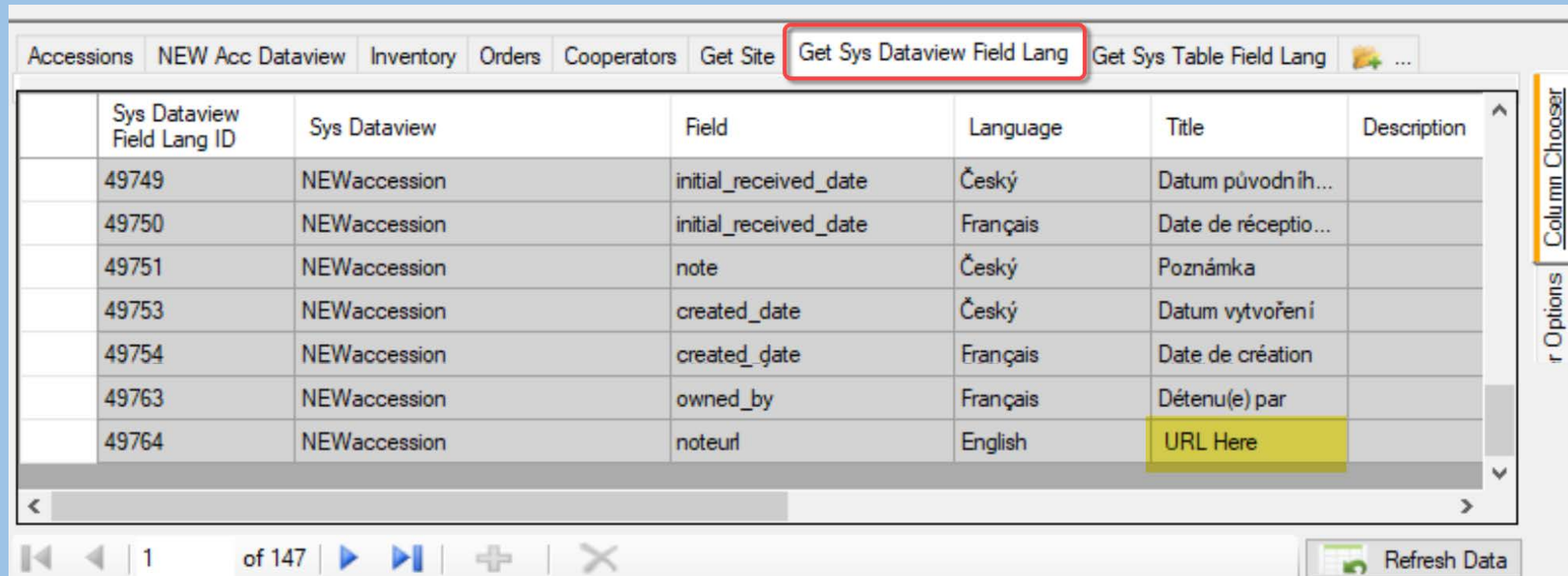
Get Sys Table Field Lang

...

	Sys Table Field Lang ID	Child Table	Table Field	Language	Title	Description	Created Date
	242	accession	owned_date	English	Owned Date	owned_date -- Date when the	8/25/2010 6:35 ...
	246	accession	owned_by	English	Owned By	owned_by -- Cooperator ID of	8/25/2010 6:35 ...
	248	accession	location1_s	English	Location 1	backu...	8/25/2010 6:35 ...
	288	accession	taxonomy_species_id	English	Taxon	taxonomy_species_id --	8/25/2010 6:35 ...
	293	accession	note	English	Note	note -- General	8/25/2010 6:35 ...
	3574	accession	status_code	English	Status	status_code --	10/14/2011 2:13..
	13877	accession	is_web_visible	English	Is Web Visible?	is_web_visible --	3/7/2014 1:12 PM
	14085	accession	doi	English	Digital Object Ide...	doi -- Digital object	11/28/2018 6:03..
	15595	accession	noteurl	English	URL	URL goes here	11/30/2020 8:34..

screen from CT: URL in this example is
the default friendly name

Dataview-specific *friendly names*



	Sys Dataview Field Lang ID	Sys Dataview	Field	Language	Title	Description
	49749	NEWWaccession	initial_received_date	Český	Datum původníh...	
	49750	NEWWaccession	initial_received_date	Français	Date de réceptio...	
	49751	NEWWaccession	note	Český	Poznámka	
	49753	NEWWaccession	created_date	Český	Datum vytvoření	
	49754	NEWWaccession	created_date	Français	Date de création	
	49763	NEWWaccession	owned_by	Français	Détenu(e) par	
	49764	NEWWaccession	noteurl	English	URL Here	

screen from CT: the Title highlighted here is the friendly name used by the **NEWWaccession** dataview (only)

What's an easier way to determine the
Default Friendly Names?

What's an easier way to determine the *Default* Friendly Names?

use Table Mappings



localhost\sqlserver > Table Mappings > accession

Database Area: ☒ Enabled

Fields Relationships Indexes

Name	Purpose	Type	User Interface	Default	Required?	Read Only?	Foreign ...
is_backed_up	Editable D...	Text	Checkbox	N	Y	N	N
location	Editable D...	Integer	Lookup Picker	{DBNull...	N	N	Y
modified_by	Auto-filled ...	Integer	Lookup Picker		N		
owned_date	Auto-filled ...	Date / Time	Date / Time Con...		Y		
owned_by	Auto-filled ...	Integer	Lookup Picker		Y	Y	Y
noteurl	Editable D...	Text	Textbox (free-form)	{DBNull...	N	N	N

Double click

...determine the *Default* Friendly Names?

Table Mapping Field Detail

Name:

☐ Is Primary Key ☐ Is Auto Incremented ☐ Auto-save on move

☐ Is Foreign Key

☐ Is Required ☐ Is Read Only

Purpose: Min Length: Max Length:

Type: ☐ Unlimited

Default Value: ☒ Empty Default Value

User Interface:

Display Text:

	Language	Title	Description
▶	Český		
	ENG		
	English	URL	URL goes here
	Español		

Bulk Editing of Dataview Friendly Names – How?

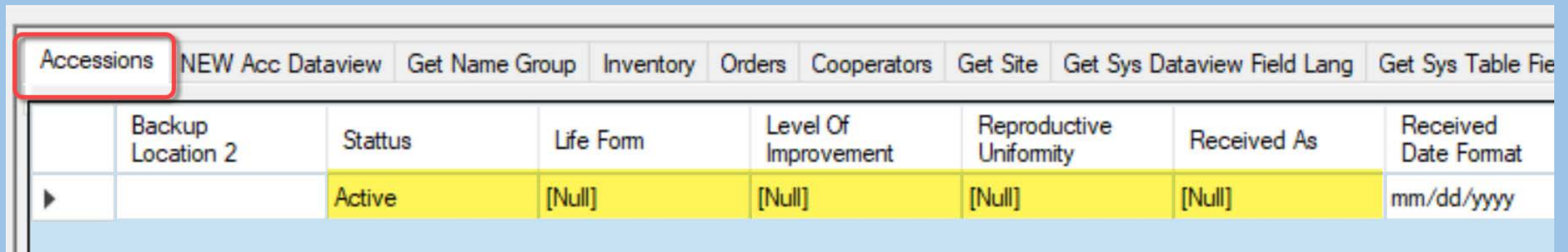
1. Login to CT as Administrator
2. Use dataview **get_sys_table_field_lang**
3. Set up a Dynamic folder:
 @ sys_table _field_lang. sys_lang_id IN (1)
 -- 1 is English
4. Edit the names (can use Drag & Drop)

Codes & Code Groups

Table	Stores data for the...
sys_table_field_lang sys_dataview_field_lang	Column headings displayed in the dataviews
app_resource	Interface elements: buttons, etc.
sys_dataview_lang	Dataviews' Titles & Descriptions
code_value code_value_lang	Codes that display in the dropdowns
sys_language	Languages installed in GG

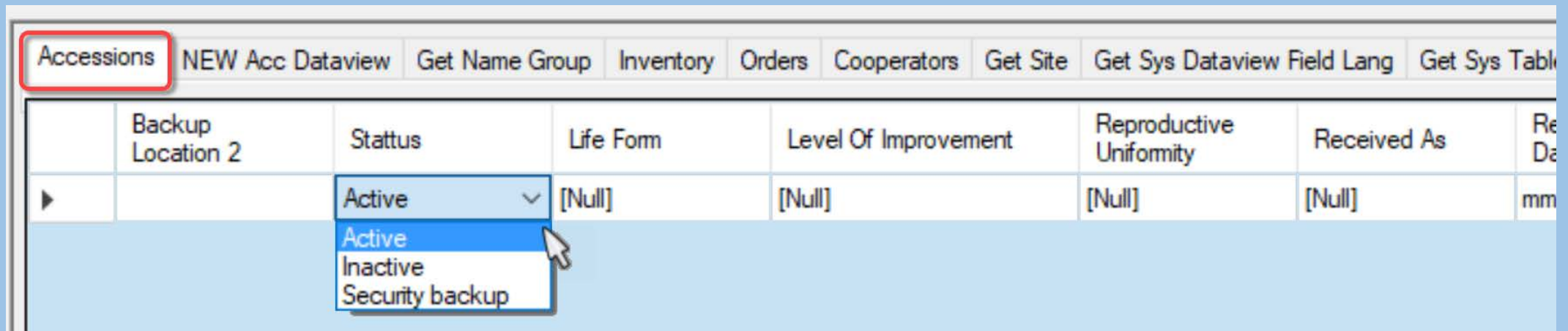
Code Groups as used in CT

Codes are used in dropdowns to control user input



The screenshot shows a software interface with a menu bar and a data table. The 'Accessions' menu is highlighted with a red box. The table has columns: Backup Location 2, Status, Life Form, Level Of Improvement, Reproductive Uniformity, Received As, and Received Date Format. The 'Status' field in the first row is highlighted in yellow and has a dropdown arrow. A dropdown menu is open, showing three options: 'Active', 'Inactive', and 'Security backup'. The 'Active' option is currently selected.

	Backup Location 2	Status	Life Form	Level Of Improvement	Reproductive Uniformity	Received As	Received Date Format
▶		Active	[Null]	[Null]	[Null]	[Null]	mm/dd/yyyy



This screenshot is similar to the one above, but the dropdown menu for the 'Status' field is expanded, showing the full list of options: 'Active', 'Inactive', and 'Security backup'. The 'Active' option is highlighted in blue, and a mouse cursor is pointing at it.

	Backup Location 2	Status	Life Form	Level Of Improvement	Reproductive Uniformity	Received As	Received Date Format
▶		Active ▼	[Null]	[Null]	[Null]	[Null]	mm

a side note...

For the Accession's Status, what determined "ACTIVE"
to be the Default?

a side note...

For the Accession's Status, what determined "ACTIVE" to be the Default?

A field in sys_table_field tells the CT what the default value is

a side note...

For the Accession's Status, what determined "ACTIVE" to be the Default?

A field in sys_table_field tells the CT what the default value is:

default_value

SQL for Determining Default Values for Codes used in the CT

```
SELECT table_name, field_name,  
       default_value  
FROM sys_table st  
JOIN sys_table_field stf ON  
stf.sys_table_id = st.sys_table_id  
WHERE default_value IS NOT NULL AND  
       default_value != '{DBNull.Value}' AND  
       default_value != ''  
ORDER BY 1,2
```


Codes & Code Groups



Review! - determine where they are used - keep what you need – get rid of those not needed (with caution)

The screenshot shows the SQL Server Enterprise Manager interface. On the left, the 'Code Groups' folder is expanded, showing a list of code groups. 'ACCESSION_NAME_TYPE' is selected and highlighted with a yellow checkmark. On the right, the 'Code Groups' task is open, showing the 'Referenced By' tab for the 'ACCESSION_NAME_TYPE' group. The tab shows a table with columns 'Dataview', 'Table', and 'Field'. The table lists the following data:

Dataview	Table	Field
	accession_inv_name	category_code
get_accession_inv_name		category_code
import_accession_inv_name		category_code

Code Groups in the AT

GRIN-Global Admin v 2.0.3.0 - [Code Group - ACCESSION_STATUS - localhost\sqlexpress]

File View Tools Help

localhost\sqlexpress - sqlserver > Maintenance > Code Groups > ACCESSION_STATUS

Group Name: **ACCESSION_STATUS** 1

Values (3) Referenced By (7 / 1)

Language: **English**

Value 2	Title 3	Description 4	Last Touched
ACTIVE	Active	Accession is present in the c...	10/9/2014 11:0
INACTIVE	Inactive	Accession that has been ina...	10/5/2011 8:09
SECURITY_BACKUP	Security backup	Part of the Security Backup c...	12/4/2015 10:3

Navigation tree:

- Dataviews
- Table Mappings
- Data Triggers
- Maintenance
 - Import Wizard
 - Code Groups
 - ACCESSION_ACTION
 - ACCESSION_LIFE_FORM
 - ACCESSION_NAME_TYPE
 - ACCESSION_QUARANTINE_STATUS
 - ACCESSION_QUARANTINE_TYPE
 - ACCESSION_RESTRICTION_TYPE
 - ACCESSION_SOURCE_HABITAT_TY
 - ACCESSION_SOURCE_TYPE
 - ACCESSION_STATUS** 1
 - ACTIVE_SITE
 - ANNOTATION TYPE

Code Groups in the AT: English

GRIN-Global Admin v 2.0.3.0 - [Code Group - ACCESSION_NAME_TYPE - localhost\sqlexpress]

File View Tools Help

Import Wizard
Code Groups
ACCESSION_ACTION
ACCESSION_LIFE_FORM
ACCESSION_NAME_TYPE
ACCESSION_QUARANTINE_STAT
ACCESSION_QUARANTINE_TYPE
ACCESSION_RESTRICTION_TYP
ACCESSION_SOURCE_HABITAT_
ACCESSION_SOURCE_TYPE
ACCESSION_STATUS
ACTIVE_SITE
ANNOTATION_TYPE
ATTACH_CATEGORY

localhost\sqlexpress - sqlserver > Maintenance > Code Groups > ACCESSION_NAME_TYPE

Group Name: ACCESSION_NAME_TYPE

Values (16) Referenced By (2 / 1)

Language: English

Value	Title	Description
CGIAR	CGIAR International C...	Name/number from a CGIAR ...
COLLECTOR	Collector identifier	Name/number from the colle...
CULTIVAR	Cultivar name	Name designated for an offici...
DEVELOPER	Developer identifier	Name/number from the devel...
DONOR	Donor identifier	Name/number from the donor...

Code Groups in the AT: ENG

The screenshot shows the 'Code Groups' window in SQL Server Enterprise Manager. The left pane displays a tree view of code groups, with 'ACCESSION_NAME_TYPE' selected. The right pane shows the details for this code group. The 'Group Name' is 'ACCESSION_NAME_TYPE'. Below it, there are two tabs: 'Values (16)' and 'Referenced By (2 / 1)'. The 'Values (16)' tab is active, showing a table of values. The 'Language' dropdown is set to 'ENG', which is circled in black. The table lists various values such as CGIAR, COLLECTOR, CULTIVAR, DEVELOPER, DONOR, and DUPLICATE, along with their last modified dates.

Value	Title	Description	Last T
CGIAR			10/5/2
COLLECTOR			10/5/2
CULTIVAR			10/5/2
DEVELOPER			10/5/2
DONOR			10/5/2
DUPLICATE			4/30/2

English (in the CT)

Accessions Inventory Orders Cooperators NEW Acc Dataview Get Sys Table Field Lang Get Accession Inventory Name ...						
	Accession Inventory Name ID	Accession	Inventory	Category	Name	Nar
▶	-1			CGIAR International Center Identifier		
				CGIAR International Center Identifier		
				Collector identifier		
				Cultivar name		
				Developer identifier		
				Donor identifier		
				Duplicate accession name		
				Exploration identifier		
				Institute identifier		
				Local name		
				Misidentified cultivar name		
				Other or unclassified name		
				Plot		
				Quarantine identifier		
				Site identifier		
				Trademark name		
				Unverified name		

ENG (in the CT)

Accessions	Inventory	Orders	Cooperators	NEW Acc Dataview	Get Sys Table Field Lang	Get Accession Inventory Name
	Accession Inventory Name ID	Accession	Inventory	Category	Name	PI R.
►	-1			CGIAR		
				CGIAR		
				COLLECTOR		
				CULTIVAR		
				DEVELOPER		
				DONOR		
				DUPLICATE		
				EXPLOREID		
				INSTITUTE		
				LOCALNAME		
				MISIDENT		
				OTHER		
				PLOT		
				QUARANTINE		
				SITE		
				TRADEMARK		
				UNVERIFIED		

Alternative Languages at: https://www.grin-global.org/docs/gg_alternative_languages.docx

Code Groups in the Import Wizard

GRIN-Global Import Wizard v 1.10.3.0

1. Choose Type of Data 2. Specify Data 3. View Results

localhost\\sqlexpress 01 - Code Groups and Code Values

* - Required Field 1 2 3 4 Load from file...

Group Name *	Value *	Title *	Description
ACCESSION_STATUS	INACTIVE	Inactive	Accession that has been inactivated
ACCESSION_STATUS	ACTIVE	Active	Accession is present in the collection
ACCESSION_STATUS	SECURITY_BACKUP	Security backup	Part of the Security Backup collection
ACTIVE_SITE	X	Site distributing g...	
ATTACH_CATEGORY	DOCUMENT	Document attach...	
ATTACH_DESCRIPTION_C...	Achenes	Achenes	

Cancel < Previous Import

2379 rows | Row 1 | code_value (cv) |

CAUTION!!!



Note from the Import Wizard “Cookbook” (Guide)

Revision Date

February 27, 2015



The IW can be helpful creating records in a test system, but it isn't really suited for production work.

Import Wizard – Does More than Import

Although it is titled “Import Wizard”

...it also has the capability to display existing records



IW Benefits

Can drag data quickly to a spreadsheet for review



Hold CTRL when dragging if you want the actual *database* fieldnames for the column headings
(instead of the *friendly* fieldnames)

Features

- can sort
- colors / click in cell for table name
- drag and drop (hold **Ctrl** for db names)
- load from file (csv)

IW Benefits

- Excellent for modifying Codes and Code Groups

Code Groups in the Import Wizard

GRIN-Global Import Wizard v 1.10.3.0

1. Choose Type of Data 2. Specify Data 3. View Results

localhost\\sqlexpress 01 - Code Groups and Code Values

* - Required Field 1 2 3 4 Load from file...

Group Name *	Value *	Title *	Description
ACCESSION_STATUS	INACTIVE	Inactive	Accession that has been inactivated
ACCESSION_STATUS	ACTIVE	Active	Accession is present in the collection
ACCESSION_STATUS	SECURITY_BACKUP	Security backup	Part of the Security Backup collection
ACTIVE_SITE	X	Site distributing g...	
ATTACH_CATEGORY	DOCUMENT	Document attach...	
ATTACH_DESCRIPTION_C...	Achenes	Achenes	

Cancel < Previous Import

2379 rows | Row 1 | code_value (cv) |

IW Benefits

- Excellent for viewing other “basic” tables

localhost\\sqlexpress

06c - Taxonomy Species

* - Required Field

Load from file...

	Family *	Family Authority	Subfamily	Tribe	Subtribe	Genus *	Genus Authority
▶	Ranunculaceae	Juss., nom. cons.	Ranunculoideae	Anemoneae		Clematis	L.
	Ericaceae	Juss., nom. cons.	Vaccinioideae	Gaultherieae		Gaulnettya	Marcl
	Geraniaceae	Juss., nom. cons.				Geranium	L.
	Poaceae	Bamhart, nom. c...	Pooideae	Poeae	Agrostidinae	Agrostis	L.
	Poaceae	Bamhart, nom. c...	Pooideae	Poeae	Agrostidinae	Agrostis	L.

< >

Cancel < Previous Import

120292 rows | Row 1 | taxonomy_family (tf) |

Main Concern with the Import Wizard

- Dataviews have changed, but the IW has not

2 Methods for Importing Data

- Import csv file
- Drag & Drop – include the headings

Results Example

GRIN-Global Import Wizard v 1.10.3.0

1. Choose Type of Data 2. Specify Data 3. **View Results**

localhost\\sqlexpress 01 - Code Groups and Code Values

Results	Row Index	Table (Alias)	Group Name	Value	Title	Description
Success - Insert	2378	code_value (cv)	MAR-TEST-CG01	T1		
Success - Insert	2378	code_value_lang (c...			Title 1	Title 1 - Sample D...
Success - Insert	2379	code_value (cv)	MAR-TEST-CG01	T2		
Success - Insert	2379	code_value_lang (c...			Title 2	Title 2 - Sample D...

Successfully imported 2,379 items. No errors occurred.

Import More Data Exit

IW

Records created by the IW are owned by the System Administrator

Accessions NEW Acc Dataview Get Name Group Inventory Orders Cooperators Get Site Get Sys Dataview Field Lang Get Sys Table Field Lang ...										
	Name Group ID	Group Name	Note	URL	Created Date	Created By	Modified Date	Modified By	Owned Date	Owned By
▶	1	ACRI	American Cocoa Research Institute		12/1/2020 10:16...	SYSTEM, Admini...			12/1/2020 10:16...	SYSTEM, Administrator,
	2	AMES	NC-7 Research		12/1/2020 10:16...	SYSTEM, Admini...			12/1/2020 10:16...	SYSTEM, Administrator,
	3	AMES.PI.DUPES	These are PI's for		12/1/2020 10:16...	SYSTEM, Admini...			12/1/2020 10:16...	SYSTEM, Administrator,
	4	AMES.SEPARAT...	ID indicating a		12/1/2020 10:16...	SYSTEM, Admini...			12/1/2020 10:16...	SYSTEM, Administrator,
	5	APAU	Andhra Pradesh		12/1/2020 10:16...	SYSTEM, Admini...			12/1/2020 10:16...	SYSTEM, Administrator,
	6	APGRC	African Plant Genetic Resources		12/1/2020 10:16...	SYSTEM, Admini...			12/1/2020 10:16...	SYSTEM, Administrator,
	7	APHS			12/1/2020 10:16...	SYSTEM, Admini...			12/1/2020 10:16...	SYSTEM, Administrator,

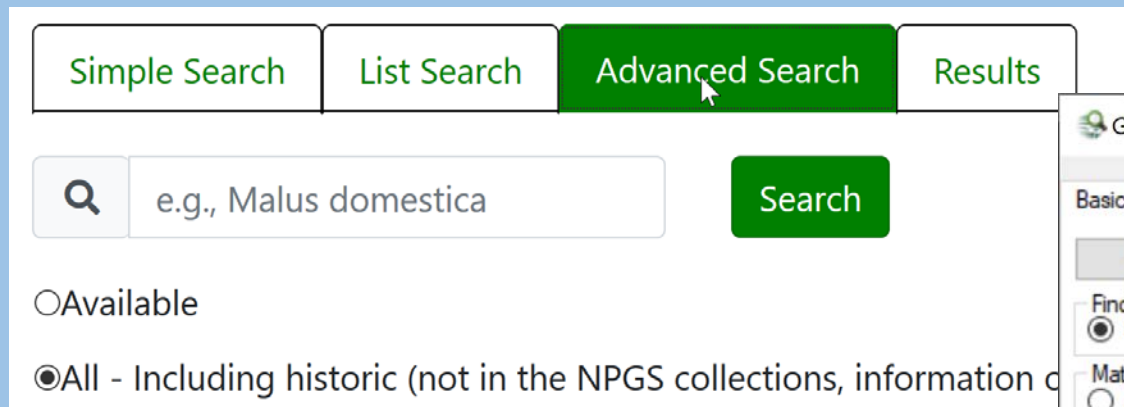
Searches

Searches

- Do the searches in the PW work exactly as those in the CT?

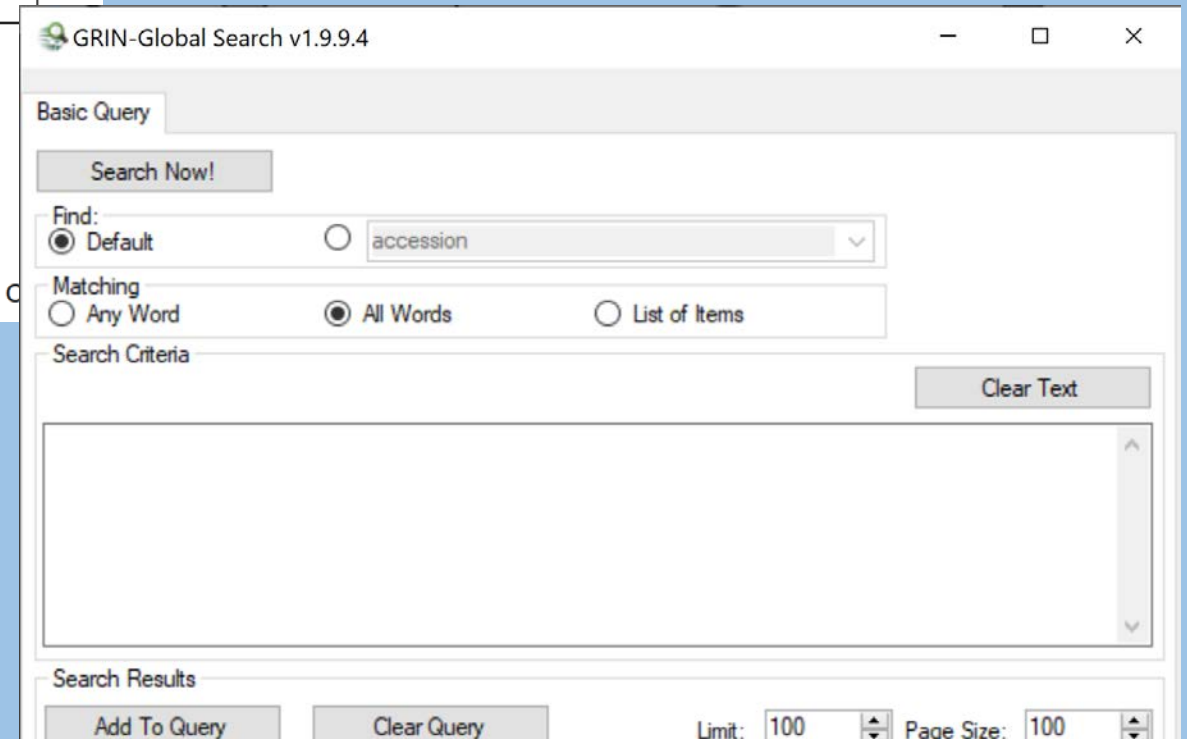
Searches

Search Engine used in both:



A screenshot of a web-based search interface. At the top, there are four tabs: 'Simple Search', 'List Search', 'Advanced Search' (which is highlighted in green), and 'Results'. Below the tabs is a search bar containing the text 'e.g., Malus domestica' and a green 'Search' button. Under the search bar, there are two radio button options: 'Available' and 'All - Including historic (not in the NPGS collections, information o'.

Public Website



A screenshot of a desktop application window titled 'GRIN-Global Search v1.9.9.4'. The window has a 'Basic Query' tab selected. It features a 'Search Now!' button, a 'Find:' section with radio buttons for 'Default' (selected) and 'accession', and a 'Matching' section with radio buttons for 'Any Word', 'All Words' (selected), and 'List of Items'. Below these is a 'Search Criteria' section with a 'Clear Text' button and a large text area. At the bottom, there is a 'Search Results' section with 'Add To Query' and 'Clear Query' buttons, and a 'Limit: 100' and 'Page Size: 100' display.

Search Tool

What Does the Search Engine Search?

1. What it's told to search for (formatted)

```
@taxonomy_genus.genus_name = 'Humulus' AND  
@taxonomy_species.species_name LIKE 'lupulus%' AND  
@accession_source.elevation_meters > 300 AND  
@accession_source.latitude LIKE '39%'
```



These search constructs can be used in the Public Website

...what does the Search Engine (SE) Search?

2. LISTS: The SE looks for *patterns*

4 blocks of text – inventory identifier

3 blocks of text – accession identifier

1 block of text (list search) – accession identifier

1 numeric block of text (list search) – order_ID



PW: an order # in a List Search displays the order's accessions

...what does the Search Engine (SE) Search?

3. Freeform (unformatted)

Enter words (and/or numbers) and the SE tries to find them as best it can

A. Searches IDs: Accession or Inventory

B. Each word is checked for an exact match on specific (~30) fields designated by DBA in the **sys_search_autofield** table

How to Determine What Fields are included in the sys_search_autofield

```
SELECT table_name, field_name
FROM sys_search_autofield ssa
JOIN sys_table_field stf
    ON stf.sys_table_field_id = ssa.sys_table_field_id
JOIN sys_table st
    ON st.sys_table_id = stf.sys_table_id
ORDER BY 1,2
```

How to add a fields to be included in the sys_search_autofield

In SSMS,
use SQL insert statement

or –

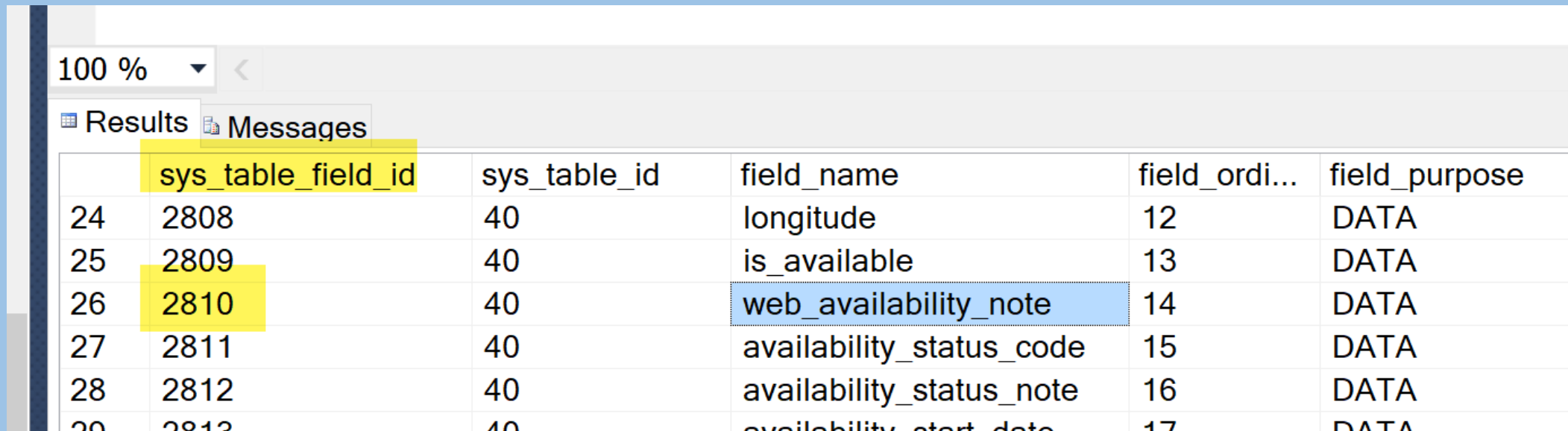
...in SSMS, determine the primary key (PK) for the field you intend to use – find that PK in the sys_table_field table

...How to add a fields to be included in the sys_search_autofield

or –

...in SSMS, determine the primary key (PK) for the field you intend to use –

find that PK in the **sys_table_field** table



100 %

Results Messages

	sys_table_field_id	sys_table_id	field_name	field_order	field_purpose
24	2808	40	longitude	12	DATA
25	2809	40	is_available	13	DATA
26	2810	40	web_availability_note	14	DATA
27	2811	40	availability_status_code	15	DATA
28	2812	40	availability_status_note	16	DATA
29	2813	40	availability_start_date	17	DATA

...How to add a fields to be included in the sys_search_autofield

add the row to **sys_search_autofield** table with that **sys_table_field_id**

[illegible]

...what does the Search Engine (SE) Search?

C. Words are also checked in any existing *full-text indexes*.

The DBA can index any text field, usually large fields such as Note fields

The GG table **sys.fulltext.indexes** lists these fields

To determine if Full Text Indexing is turned on or off

```
SELECT fulltextserviceproperty('IsFulltextInstalled')
```

As answer

```
/* 1 indicates Full Text Indexing is installed; 0 indicates that it is not) */
```

How would you know what fields are indexed?

```
SELECT DISTINCT
    object_name(fic.[object_id])as
table_name,
    [name]
FROM
    sys.fulltext_index_columns fic
INNER JOIN sys.columns c
    ON c.[object_id] = fic.[object_id]
    AND c.[column_id] = fic.[column_id]
```

Questions?

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