

# GRIN-Global Trainer's Guide

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## Compilation of Resources & Recommendations

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*in progress*

## Who Should Use This Guide?

Personnel responsible for training or administering GRIN-Global users should become familiar with this guide's contents. The guide summarizes the training and documentation resources available to the GRIN-Global community.

### **Comments/Suggestions:**

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## Resources

GG Feature / Issue	Resource
GG Training wiki page	Please refer to the GRIN-Global (GG) wiki training and documentation page for links to many documents and training files. (See: <a href="http://www.grin-global.org/index.php/Training">http://www.grin-global.org/index.php/Training</a> .) Any training or documentation file mentioned in this document will be found on that wiki page.
GG schema	<a href="#">Data Dictionary</a> (Online version – Google spreadsheet) <a href="#">Data Dictionary</a> (PDF version of the Data Dictionary)
installing	The instructions for installing GRIN-Global are contained in the <a href="#">Installation Guide</a> on the Training wiki page.

## Installing GRIN-Global

In larger organizations, GRIN-Global will typically be installed by an administrator on a network. The advantage of this is, of course, that multiple users can access and share data from remote locations.

In smaller organizations, the complete GRIN-Global suite of applications will most likely be installed on one or several individual user PCs. In that case, the users may be filling both roles – administrator and user. In using multiple PCs, with a complete copy on each PC, their databases will *not be* interconnected.

## General Training Suggestions

The GRIN-Global wiki [training page](#) has user guides, exercises, videos, and files that collectively help to explain GRIN-Global and how to use it. However, as with any new software, hands-on practice is always beneficial; new users should be given opportunities to practice with, and explore GRIN-Global.

On a networked environment, it is ideal to have a completely separate GG training database where new users could be directed and where sample data would exist. An administrator can easily load a limited set of complete data (accessions, inventory, taxonomy, observations, etc.) by invoking the Import Wizard and using the *Cookbook-Importing Data* exercise files listed on the wiki page under **Training Exercises**. Loading the sample data via the Admin Tool Import Wizard makes it possible for the new user/learner to start using the Curator Tool without needing to input all kinds of data.



Any training exercises referenced in this document are also listed on this wiki page, including their ancillary files.

On stand-alone PCs, where the full GRIN-Global suite is installed and the database is on the localhost, a user should be set up with the sample data referred to above, directed to Curator Tool training (online exercises or a workshop), and allowed practice time. When the user is ready to process actual genebank data the training database can be cleared by using the GRIN-Global Updater program to uninstall the training database and install a new (empty) production database.

## GRIN-Global User Types

GRIN-Global users can be categorized into the following three groups:

- Curator Tool users – users such as curators or technicians who handle germplasm accessions, inventory, and orders. Also, taxonomists may want to use the Curator Tool.
- Public Website users – anyone interested in the GRIN-Global data; the Curator Tool users described above will typically use the Public Website as well to search for specific accessions, etc.
- GRIN-Global administrators – personnel responsible for the installation of the GRIN-Global software and for the establishing of user accounts and permissions, as well as the maintenance of GRIN-Global system data (such as Code Groups and values) and dataviews.

The Public Website has a default guest account set up for anyone to perform searches and use the GRIN-Global website.

Note: As of release 0.9, since the Public Website is a browser-based application and has a relatively easy-to-use interface, it has not yet had any documents or extensive training curricula designed for it. It is assumed that the Public Website users will be comfortable with its interface including the ubiquitous shopping cart concept. Most users will generally spend time experimenting with their searches, and expertise is best gained there through practice of meaningful searches. Anyone can access a sample GG Public Website that currently is storing data similar to the data stored in the U.S. GRIN system, see: [GRIN-Global Test Public Website](#).

### *Recommended Training*

There are two main types of GRIN-Global trainees: users who need to be trained on the use of the GRIN-Global Curator Tool and the Public Website, and users who will serve as GRIN-Global administrators. We recommend that the administrators also be taught how to use the Curator Tool and the Public Website.

Be aware that some users may find it difficult to grasp the relational database concept if their organization previously managed its data in simple spreadsheets or lists.

This “user” training also includes an introduction to the GRIN-Global schema. Because of the flexibility and inherent data fields built into GRIN-Global, it is important that users understand how the data fits together and is interrelated. In some organizations, the concept of using a relational database to manage their data is a new concept, while for others that have been using Access, FoxPro, or some other relational database, this will not be much of a learning issue. However, everyone using GRIN-Global needs to understand the many GG tables and how they support each other. Some organizations may at first opt to not store all of the data that could possibly be handled by GG, whereas others may decide to fully implement GG and capture and store as much germplasm data as possible.

Personnel responsible for administering GRIN-Global will also need training on the Admin Tool and on the database concepts with which all administrators must be familiar. Ideally the administrator will also have background knowledge pertaining to databases and have some Information Technology experience, especially with administering and installing software on users’ PCs that run Windows Operating Systems.

The GRIN-Global training wiki page has several self-guided exercises as well as videos, which may be adequate for some Curator Tool users and which can be substituted for training in a hands-on Curator Tool workshop.

#### *Curator Tool & Public Website Training*

Because of similarities with Excel and other spreadsheet software, many PC users will find the Curator Tool’s interface fairly easy to use. The Public Website is a browser-based application which uses conventions familiar to most Internet users, such as search boxes and a shopping cart (for ordering germplasm).

Since GRIN-Global consists of hundreds of tables, the higher hurdle for many new users will be learning the GRIN-Global schema and determining where data is stored. Many of GRIN-Global’s tables and fields were modeled after the USDA’s GRIN database, which has evolved over the years to meet the needs of different U.S. users and genebank sites.

GRIN-Global was intentionally designed to be adaptable to meet any organization’s germplasm management needs. Some organizations may find certain tables and related dataviews not relevant to their needs and decide to ignore them entirely. In other cases, organizations may add additional fields or tables after using the software for some period of time.

#### *Admin Tool Training*

GRIN-Global administrators need to know how to use the functions provided in the GRIN-Global Admin Tool. They also will need to know how to configure GRIN-Global for a networked environment or in some cases for stand-alone PCs. The ideal administrator has some background knowledge on relational databases, and has used one of the four database tools (SQL Server, MySQL, Oracle, or Postgre) to set up a database infrastructure.

## Establishing User Accounts

When initially installed, GRIN-Global has two default users:

- **administrator** – having full admin rights to GRIN-Global
- **guest** – user account established for guest users of the public website

After installing the GRIN-Global software, new user accounts need to be added. One option is to create training UserIDs, naming them **trng1**, **trng2**, etc. They will need permissions granted so that they can update and delete records or the environment can be configured so that the security is not enabled. Directions for establishing permissions are detailed in the Admin Tool Guide *Security* section as well as in the [Administrator's Quick Guide for Adding Users and Implementing Security](#).

# Curator Tool Training – Sequential Order of Topics

Abbreviations:

AT	Admin Tool
CB	“Cookbook” (AT Import Wizard)
CT	Curator Tool
DV	dataview
QBE	Query-by-example
PPT	PowerPoint file
PW	Public Website
ST	Search Tool



There are some basic introductory hands-on exercises, [10 Exercises for Becoming Familiar with the CT](#) (“10 exercises”) which can be incorporated in a workshop (if the participants haven’t already completed this previously (which is available online))

Topic	Est. Time*	Objectives / Subtopics	Recommended Approach [ Resources ]
Introductions	30	<ul style="list-style-type: none"> <li>• Create a collegial workshop environment</li> <li>• Review Workshop Objectives</li> </ul>	<p>Welcoming remarks; Review any logistics, scheduling issues, etc. Present an overview of the workshop [CT workshop objectives.ppt]</p>
Overview of GG suite	30	<ul style="list-style-type: none"> <li>• Describe the Grin-Global Environment – including the main programs and their functions</li> <li>• Explain where their data will be stored (local PC or network server)</li> </ul>	<p>Review GG suite of applications – focus on the main purpose and features of the Curator Tool and Public Website.</p> <p>Explain where the participants’ data will be stored (networked vs. localhost).</p> <p>Discuss the GG apps serving as the interface to the data which is stored in a database such as Oracle, MySQL, etc.). [The CT Guide: <i>Introduction to GRIN-Global</i> section; GG components.pptx]</p>
Relational database concepts	30	<ul style="list-style-type: none"> <li>• Explain relational database basics</li> <li>• Describe the advantages of a relational DB (as compared to a spreadsheet)</li> </ul>	<p>Compare relational &amp; flat databases; Briefly review the GG schema and data dictionary. Give examples of relational databases. [Use relational db vs. spreads.pptx]</p> <p>[The CT Guide has information on relational databases (see the section <i>GRIN-Global’s Table Relationships</i>); also a Google search provides many</p>

Topic	Est. Time*	Objectives / Subtopics	Recommended Approach [ Resources ]
			examples of relational databases.] [relational db vs spreads.pptx]
Starting the CT; Logging in	15	<ul style="list-style-type: none"> <li>Start CT from the Start menu</li> <li>Change servers and passwords</li> </ul>	Walk through together: start from the Windows' Start button; change passwords, change servers, [CT Guide; <a href="#">10 Exercises for Becoming Familiar with the CT</a> ("10 exercises")]
CT interface overview	20	<ul style="list-style-type: none"> <li>Identify the main CT interface components</li> <li>Switch from list view to form view</li> <li>Use the displayed DV tabs to switch dataviews</li> </ul>	Demo: (also, refer to CT: CT <i>interface</i> section (discuss list panel, data grid, dataviews, forms).  Briefly explain in general terms: <ul style="list-style-type: none"> <li>what a list does: CT: <i>Lists Overview</i> section</li> <li>what a dataview is: CT: <i>Dataviews</i> section (...a programmed query that displays records from one or more tables...)</li> </ul> [video: <a href="#">Interface</a> ]
Searching for records	60	<ul style="list-style-type: none"> <li>Search for records using the ST window</li> <li>Filter (Show only) records</li> </ul>	Demo the search window: overview, searches with any, all, & list of items criteria, Query-by-Example [10 exercises #2, #3]
List management	30	<ul style="list-style-type: none"> <li>Create and edit tabs and lists</li> <li>Describe reasons for using lists</li> <li>Differentiate between deleting lists and DB deleting records</li> </ul>	Demo/Exercise: Demonstrate establishing & maintaining folders, lists, & sub-lists. [10 exercises #4]  Exercise: Open the Crop dataview. Build a list which points to all crops. Open the Crop Trait dataview. With the Crop Trait dataview active, click on one item in the Crop List and then observe the records shown in the Crop Trait dataview.
Accession Dataview	30	<ul style="list-style-type: none"> <li>Copy records from the ST to the CT</li> <li>Reorganize lists</li> </ul>	Drag accessions from the Search Tool window. Have participants create several lists by dragging records from the ST. [10 exercises #5, #6]
Accession Dataview	45	<ul style="list-style-type: none"> <li>Import new accession records into the CT from a spreadsheet</li> </ul>	Import (drag) accessions from a source spreadsheet [ <a href="#">Importing Accessions using the Curator Tool</a> ]
Record management	45	<ul style="list-style-type: none"> <li>Create a new accession record; edit existing records</li> </ul>	Create, edit, filter, & delete records [10 exercises #7, #8]
Dataview interface	20	<ul style="list-style-type: none"> <li>Demonstrate moving columns, hiding / displaying columns (using the column chooser); using Other Options to set up colors</li> <li>Explain what it means when a column has a gray color</li> </ul>	[10 exercise #9]
List management II	20	<ul style="list-style-type: none"> <li>Create custom names for list items</li> </ul>	customizing names [10 exercises #10]

Topic	Est. Time*	Objectives / Subtopics	Recommended Approach [ Resources ]
Lookup tables		<ul style="list-style-type: none"> <li>Access the Lookup Table Loader window</li> <li>Describe when the Lookup tables will need updating</li> </ul>	Access Other options: Lookup Table Maintenance, Max rows, Query paging maintaining, troubleshooting
Accession Wizard	45	<ul style="list-style-type: none"> <li>Invoke the accession wizard</li> <li>Enter data in the related accession windows; save after each window is completed</li> <li>Describe the data stored in the various accession dataviews</li> </ul>	<a href="#">Accession Wizard</a>
Security	60	<ul style="list-style-type: none"> <li>Assign permissions to CT users</li> <li>Assign ownership to other CT users</li> </ul>	permissions, ownership, security wizard Use the Security Wizard in CT [ CT: 77-80 ]
Image handling	30	<ul style="list-style-type: none"> <li>Copy images into GG</li> <li>Display GG images</li> </ul>	adding and accessing images <a href="#">[Importing Images Using the Curator Tool exercise]</a>
Reports	15	<ul style="list-style-type: none"> <li>Access and print existing reports</li> </ul>	how to access & print reports
Inventory Handling		<ul style="list-style-type: none"> <li>review the accession_inv_ dataviews as well as the inventory – only dataviews</li> </ul>	Discuss schema: Inventory [tbd]
Order wizard		<ul style="list-style-type: none"> <li></li> </ul>	Discuss schema: Orders [tbd]
Advanced Searches		<ul style="list-style-type: none"> <li></li> </ul>	expanded QBE [tbd]
Dynamic Folders		<ul style="list-style-type: none"> <li>Build dynamic folders from copied search criteria</li> </ul>	[tbd]
Public Website	60	<ul style="list-style-type: none"> <li>Execute general, taxonomic, and descriptor searches using the Public Website</li> <li>Use the shopping cart and My Favorites features</li> </ul>	Brief overview Exercise: ordering germplasm

\* Estimated time (in minutes)

## Admin Tool Training – Sequential Order of Topics

Topic	Est. Time*	Objectives / Subtopics	Recommended Approach [ Resources ]
Introductions	30	<ul style="list-style-type: none"> <li>• Create a collegial workshop environment</li> <li>• Install and maintain the GRIN-Global system for an organization; add users and import existing organizational data;</li> </ul>	<p>Present Welcoming remarks; (also cover logistics)</p> <p>Review Workshop Objectives [AT workshop objectives.pptx]</p>
Overview of GG suite	30	<ul style="list-style-type: none"> <li>• Describe the Grin-Global Environment – including the main programs and their functions</li> <li>• Explain where their data will be stored (local PC or network server)</li> </ul>	<p>Determine if the participants already are familiar with the GG components. If they had the CT introduction, this would be a good place to review by questioning.</p> <p>Review GG suite of applications – focus on the main purpose and features of the Curator Tool and Public Website; explain where the participants’ data will be stored (networked vs. localhost) [The CT Guide; also GG components.pptx file]</p>
Schema Overview	60	<ul style="list-style-type: none"> <li>• Contrast GG with the organization’s current genebank data schema</li> <li>• Define what is meant by a “friendly name” (vs. actual database field name)</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding the Schema: Explaining the Rationale for the Parent/Child Relationships; (refer to the CT <i>GRIN-Global Overview</i> section)</li> <li>• High-level comparison to their current tables – Do they have Inventory? – Orders? – Observations?</li> <li>• Review online <a href="#">data dictionary</a></li> </ul> <p>Exercise: Participants review the online dictionary; discuss what is meant by “friendly names;” explain the significance of the <b>created</b>, <b>modified</b>, and <b>owned by</b> fields; discuss the data types; determine if everyone understands “null” and “not null.” (The static (PDF) version of the DD contains brief explanations of the above in the introduction.)</p>
Dataviews: Intro – purpose and basic edits	60	<ul style="list-style-type: none"> <li>• Modify dataview fields in the DV editor (rename headings; change required, read-only, and visibility options)</li> </ul>	<p>Dataviews: introduce DV Editor interface; copying (backing up), exporting; relate “simple” changes to the CT (Use the Cooperator dataview for the exercise.)</p>

Topic	Est. Time*	Objectives / Subtopics	Recommended Approach [ Resources ]
			<p>Exercise - Change:</p> <ul style="list-style-type: none"> <li>• English column heading (rename to something else; ex: <b>note</b> to <b>comments</b>)</li> <li>• a field to <b>required</b> (ex: <b>discipline_code</b>)</li> <li>• a required field to <b>not-required</b> (ex: <b>sys_lang_id</b>)</li> <li>• a field to <b>read-only</b></li> <li>• a field to <b>not visible</b></li> </ul> <p>[Refer to the AT <i>Dataviews</i> section]</p>
Dataviews: User Interface fields	60	<ul style="list-style-type: none"> <li>• Use the DV editor to identify fields that obtain their data from a drop down or lookup source</li> <li>• Explain where the lookup picker and the dropdown get their data</li> </ul>	<p>Dataviews: understanding relationships between User Interface and Drop Down Source and Lookup Picker Source (by reviewing the AT and the CT) [AT 50-51]</p> <p>Hands-on Exercise:</p> <p>(1) Modify the Accession dataview – (a) first, in the CT, start adding a new accession and use the “Level of Improvement” dropdown. Observe how it works. (b) in the AT, change the IMPROVEMENT_STATUS_CODE (“improvement level”) to a text field; (c) return to the CT, create another accession record and enter data in the level of improvement field.</p> <p>(2) Locate the source data for a drop down (for example, find several values for: ACCESSION_NAME_TYPE, ACCESSION_STATUS, DESCRIPTOR_CATEGORY, IMPROVEMENT_LEVEL, INVENTORY_VIGOR, ORDER_REQUEST_ACTION, REGENERATION_METHOD)</p>
Import Wizard: Basics; importing Code Groups	60	<ul style="list-style-type: none"> <li>• Use the IW to import Code Groups and Values</li> </ul>	<p>Intro to the IW; Importing Code Groups &amp; Values;</p> <p>Exercise: <a href="#">Import Wizard &amp; Code Group Editor Exercise (Admin Tool)</a>; use 01-codes-values.csv</p>
Dataviews: rearranging the order of columns	30	<ul style="list-style-type: none"> <li>• Describe the general dataview editor interface; what SQL Server code &amp; auto-synchronize</li> <li>• Rearrange the column order</li> </ul>	<p>Dataviews:</p> <ul style="list-style-type: none"> <li>• Discuss how the SQL Server code relates to the bottom half of the screen; discuss auto-synchronize;</li> <li>• Show how to move the code to rearrange</li> </ul>

Topic	Est. Time*	Objectives / Subtopics	Recommended Approach [ Resources ]
			the column order
Dataviews: Deleting a required field	30	<ul style="list-style-type: none"> <li>Explain why required fields cannot be deleted</li> </ul>	Show the impact of deleting a required field; Default value vs. no default value Exercise:
AT: Import Wizard: Importing Sites	30	<ul style="list-style-type: none"> <li>Use the GG online dictionary to determine details on fields (using the <b>Site</b> table as an example)</li> </ul>	IW: Importing Sites [Cookbook: <i>Site Table</i> section] Exercise: Import sites using the 02-site.csv file
CT: Interface, DVs, (& Sites)	30	<ul style="list-style-type: none"> <li>Use the AT dataview editor to determine what area a dataview is stored in</li> </ul>	Review sites just imported in previous lesson; Hands-on guided practice; including exercise to manually add specific sites in the CT. Exercise: Finding the Site when establishing a new tab in the CT is not intuitive. (a) Have them use the CT to add a tab for the <b>Get Site</b> dataview. Then show how to use the AT Properties tab for the Site dv to determine which area to search for the dv. ( <b>Cooperators</b> ) (b) Manually add a new site in the CT. []
AT: Importing Region Data; CT: review	20	<ul style="list-style-type: none"> <li>Use the AT Import Wizard to import <b>Region</b> data</li> </ul>	IW: Using Import Wizard to add regions: CT: review regions and edit and add an existing region (& add) [CB: <i>Regions</i> section ]
AT: Import Wizard: Importing Geography	15	<ul style="list-style-type: none"> <li>Use the IW to import Geography records</li> <li>Describe the purpose of “maps” tables [tbd?]</li> </ul>	IW Exercise: importing Geography records [CB: <i>Geography</i> section]
AT: adding users / groups; define cooperators	60	<ul style="list-style-type: none"> <li>Demonstrate adding a new user</li> <li>Describe what each of the following settings controls: <b>Enabled, Active, Language, and Site Code</b></li> </ul>	Use AT to create a test user, including some cooperator info for him/her; (permissions discussed in detail next lesson) [ AT: 28-33]
AT: Permissions (Part 1)	30	<ul style="list-style-type: none"> <li>Disable security entirely</li> <li>Assign users to existing Groups and assign individual permission to users</li> </ul>	Permissions (1) disabling security (Web Application); (2) assigning permissions to users & groups [AT: 36-38 ] Exercise: Use AT to assign that users to the groups; assign permissions; create a new

Topic	Est. Time*	Objectives / Subtopics	Recommended Approach [ Resources ]
			permission based on some field criteria
AT: Permissions (Part 2)	60	<ul style="list-style-type: none"> <li>• Create new permission settings based on field criteria and new groups</li> </ul>	(3) review existing & create new permissions (4) tables vs. dataviews, ... [AT: 39-41 ]
CT: Security Wizard	60	<ul style="list-style-type: none"> <li>• Demonstrate how to use the CT Security Wizard to manage user record access</li> </ul>	Use the Security Wizard in CT and review the impact within the Admin Tool (users, groups, table level, owner, etc.) [CT: 77-80 ]
Languages; App Resource table	60	<ul style="list-style-type: none"> <li>• Describe the various language settings needed to control the language environment for the user</li> <li>• Modify the friendly name of a dataview column</li> </ul>	(1) User setting (2) Column headings (3) code_value_lang; dataview_fields_lang; sys_lang
Searches	60	<ul style="list-style-type: none"> <li>• Demonstrate how to conduct simple text searches as well as QBE searches</li> </ul>	Various Searches Explained; [CT: 57-64 ] Search Exercises
Taxonomy (Part 1)	40	<ul style="list-style-type: none"> <li>• Describe the Taxonomy Area of the database</li> </ul>	Review Schema; [CB: 23-26 ]
Taxonomy (Part 2)	20	<ul style="list-style-type: none"> <li>• Import the three Taxon IW files</li> </ul>	Import using IW
Crop Traits	90	<ul style="list-style-type: none"> <li>• Describe the related crop tables and dataviews</li> <li>• Add values to a code group using the Code Group editor.</li> </ul>	Review Schema; Import using IW [CB: 27-33 ] Complete the <a href="#">Import Wizard &amp; Code Group Editor Exercise (Admin Tool)</a>
Create a new dataview		<ul style="list-style-type: none"> <li>• Create a new dataview in the AT dataview editor and see it invoked in the CT</li> </ul>	Exercise: Create a new dataview (right click on the <b>Dataviews</b> node; select <b>New Dataview...</b> from the menu.) Drag the <b>Method</b> table from the <b>Name</b> panel under <b>Source Table and Fields</b> .
Methods	60	<ul style="list-style-type: none"> <li>• Modify a dataview to include an OR construct so that wildcard parameters are used to display the contents of the table in the CT</li> </ul>	Review Schema; Import using IW [ CB: 34-36 ] [??? tbd how simple to do?] Exercise

Topic	Est. Time*	Objectives / Subtopics	Recommended Approach [ Resources ]
Import Wizard;	60	<ul style="list-style-type: none"> <li>• Demonstrate adding Accession data via the AT IW</li> <li>• Demonstrate using the CT Accession Wizard to edit or add additional accession data</li> </ul>	Bulk importing of Accessions & Accession Names data; handling error messages [AT: 36- CT: <i>Creating New Accession Records Using the Accession Wizard</i> section]
Inventory	90	<ul style="list-style-type: none"> <li>• Describe the Inventory fields</li> <li>• Recognize and discuss default (virtual) inventory records</li> <li>• Use IW to import Inventory data</li> </ul>	Review Schema Import Inventory using IW [
Inventory Maintenance Policy	30	<ul style="list-style-type: none"> <li>• Use IW to import Maintenance data</li> <li>• Describe the ultimate function of the Maintenance data</li> </ul>	[tbd: triggers not established yet]
Indexes & Lookup Tables	45	<ul style="list-style-type: none"> <li>• Recognize Situations that Require Indexes to be rebuilt or Lookup Tables to be reloaded</li> </ul>	Lookup Tables Explanation, Purpose, Handling [ CT: 35-38 ]
Install full GRIN-Global system on a stand-alone PC	120	<ul style="list-style-type: none"> <li>• Install GG on a stand-alone PC that has not had a previous GG installation</li> </ul>	Exercise: This will include installing all pre-requisites and then we will compare connecting the CT to this new localhost vs. connecting the CT to a dedicated GG server.
Installation & Admin Issues	360	<ul style="list-style-type: none"> <li>• Load an organization's data using the AT Import Wizard</li> <li>• Review any known installation hurdles</li> <li>• Set up users and permissions</li> </ul>	Exercise: Set up an organization completely from scratch, using participant data. They must add user accounts with appropriate permissions, import data using the AT Import Wizard, and create some organization –specific codes.
Trouble-Shooting		<ul style="list-style-type: none"> <li>• Review any known installation or administration issues</li> </ul>	Discuss / review: Users with non-admin rights; installation interruptions; etc.
SQL Utilities		<ul style="list-style-type: none"> <li>• Back up the GG database using the organization's database utilities</li> </ul>	Overview of SSMS (including caveats); Run a SQL "utility"; Doing a backup and restore