

## ISIS Inventory User Handbook for FY 2010

### Background

ARS 41-3504 (A (1(e))) states that GITA is to coordinate a “detailed list of information technology assets owned, leased or employed by the state.” To inventory such assets, GITA has developed the **Information Services Inventory System (ISIS)**, an online web application for state agencies, boards, and commissions to report IT inventories. ISIS is a perpetual inventory and available for updates throughout the year as agencies acquire new technology hardware and software. All IT inventory assets shall be as accurate as possible by September 30<sup>th</sup> of each year for all agencies, boards and commissions.

### Purpose of Statewide IT Inventory

The purposes for maintaining a statewide IT inventory are as follows:

- To track products for an agency by serial number, asset tags and physical location;
- To track products for an agency by model and version in keeping current with the industry;
- To analyze “Green” IT products for energy star ratings and consumption;
- To analyze and evaluate target technologies for the agency and the state;
- To review and analyze products in support of web services architecture for each agency;
- To further evaluate and support agencies with refresh efforts for products and services;
- To further leverage economies of scale for the acquisition of products and services;
- To establish an estimated cost of inventory for the state;
- To standardize variations in product names (asset codes), models, and versions according to industry information.

Target technologies are based on IT industry standards for acceptable use in public and private sectors for open systems architecture exclusive of proprietary products for the integration of services and information. Target tables are identified as the OSI, Platform, and Software Target tables located at <http://www.azgita.gov/enterprise%5Farchitecture/> . Target deployments should always be based on the most currently available models, versions, or releases, etc., for the state. All IT inventory assets are considered sensitive information by the state and any reporting of such inventory to third parties is performed in aggregate so as not to identify any specific agency. The S815 Configuration Management Standard provides more information on the ISIS IT asset inventory system and maintenance.

The ISIS IT inventory captures both hardware and software assets of the agency as well as software applications for agency programs and maintained on a SQL-Server database.

**SOFTWARE APPLICATIONS** – Software applications refer to either custom-developed or commercial/government off the shelf software applications that support business services and benefits to the public. The state is particularly interested in mission critical applications that provide a critical public service, or addresses life safety issues, or a legal mandate from the state or federal government. Other interests are based on privacy and IT security for the continuity and recovery of state government.

**HARDWARE AND SOFTWARE ASSETS** – Each IT inventory record has a three tiered relationship of asset categories to identify IT assets in detail or aggregate. they are starting with the highest level: Asset Groups, Asset Types and Asset Codes. Example:

Asset Group: **END USER DEVICE**  
Asset Type : **Personal Computer**  
Asset Code : **Pentium III**

**Asset Groups** – there are six assets groups that refer to the highest level or category of products on ISIS that identifies the spectrum of technologies today:

- 1) End user devices (i.e., includes PCs, Macintoshes, UNIX workstations, and other desktop machines dedicated to a single user's activity, as well as mobile devices such as PDAs, and laptops, and shared devices, such as printers, scanners, etc.)
- 2) Mainframe (i.e., includes Unisys, HP, Groupe Bull, Fujitsu, Hitachi, NEC and IBM zSeries, etc. that are traditionally large, institutional computers intended to service multiple users from the smaller, single client devices.);
- 3) Mini-computers (i.e., computers that lie between the range of End User Devices and Mainframe Computers, such as AS/400, etc.),
- 4) Servers (i.e., A network computer device that manages network resources such as Software Applications, FAX, FTP, LIST, MAIL, PROXY, TELNET, WEB services, etc.),
- 5) Software (i.e., includes Graphics, Business Continuity, Web Development, Publishing, multimedia, anti-virus, Business Intelligence, Database, Diagramming, Document Management, Email, Office Suites, Operating Systems, Security etc.);
- 6) Telecommunications (i.e., IDS, ATM Switches, Bridges, CSI/DSU, Data Switches, Network Management, Firewall, Gateways, Hubs, Microwave, Routers, etc.)

**Asset Type** – is a sub-category of products under Asset Group such as PC's, Laptops, network computers, printers, storage, etc. of which you can select from a drop down list of specific technology type (or category) of products.

**Asset Code** - is a sub-category of products under Asset Type and synonymous with product name (i.e., Pentium III, Quad Core, Z900, Itanium, AS/400) and not to be confused manufacture name (i.e., Dell, IBM, Sun Systems, HP, etc.) nor with model number (i.e., Latitude C800, EVO, GX260, 2014-702, etc.)

When adding inventory to ISIS the system will provide a drop down list of assets to select for Groups, Types and Codes. A list of all Groups, Types and Codes can be located in the *Asset Type & Asset Code* document at [www.azgita.gov/planning/](http://www.azgita.gov/planning/). Required data fields are identified in the *Data Elements* document also located at the above website.

## Getting Started

A Logon ID and password is required for access to the online ISIS web application. Agency personnel must first obtain approval from the agency CIO for access to ISIS and then obtain a Logon ID and Password from GITA by contacting the GITA Planning Manager at (602) 364-4790 or emailing a request to [ITplanning@azgita.gov](mailto:ITplanning@azgita.gov). The assigned Logon ID and password is used for both ISIS and PARIS. Please include the email address for each proposed user so that a private email with a password can be sent to each person.

IT asset inventory can be entered online through ISIS, or you can upload all your asset inventory in an "Excel.csv" file format; please refer to the ***ISIS Required Import File Format*** section at [www.azgita.gov/planning/](http://www.azgita.gov/planning/). To add data online, the user clicks on either the ADD NEW APP or ADD NEW ASSET button, whichever is appropriate. An entry screen with required and optional fields is provided for all data elements.

During the month of May and prior to fiscal year end, the IT asset inventory for all agencies are rolled-over into a new fiscal year of which the inventory status changes to "WORK IN PROGRESS" to allow for updates and additions to IT inventory for all agencies.

When an agency has completed all of their updates and additions to inventory by the end of September 30<sup>th</sup>, the user shall change the inventory status to "INVENTORY SUBMITTED". GITA will review and approve the inventory and change the status to "OPEN FOR UPDATING". This will allow agencies to continue adding and updating inventory records throughout the year to lessen the burden of a mass update at one time.

If an agency has a new product (asset code) or any other tabled field that needs to be added for validation on ISIS, please call or email the IT Planning Manager at (602) 364-4790 or [ITplanning@azgita.gov](mailto:ITplanning@azgita.gov). We understand the urgency in keeping the database current and will do so immediately. Please refrain from using "Other" for your selection even though it is available, for "Other" provides no value in analyzing or aggregating inventory results.

Previous years' inventory may be viewed through use of the "SELECT INVENTORY" heading in the left hand column. In addition, reports are available by clicking on REPORT, then click on the appropriate report from the pull-down menu. The following **reports** can be generated using Adobe Acrobat:

- Entire Inventory
- All Inventory Hardware
- All Inventory Software
- All Inventory Applications
- Sub-Organizational Asset Summary
- Sub-Organizational Asset Software Summary
- Entire Agency Report
- Complete Sub-Organization Application Inventory

Because IT inventory assets are rolled over from one year to the next, it is highly recommended that agencies begin and end their inventory entry process by printing a report or exporting a .csv file of the inventory.

### **Features of ISIS**

The most used features of ISIS is the ability to upload data to ISIS from other inventory systems maintained by state agencies. When agencies extract data from their existing inventory system the data must be converted to an "Excel.csv file format using standard naming for Asset Groups, Types and Codes. When completed, upload the data under the left-hand column by clicking "UPLOAD" and enter an valid email address and file location of the .csv file.

Email addresses are used to confirm receipt of the file and for any system error messages. If the file is in the wrong file format, ISIS will not be able to interpret the error and no error message will be sent. Error messages are returned within ten minutes or less; if you have not received a confirmed receipt or error message please alert the GITA IT planning manager at (602) 364-4790. The first row of any .csv upload shall consist of field headings to verify all data fields in columns for accuracy, since any missing data fields or columns will cause data to be misaligned and misinterpreted.

Agencies also have the ability to download IT inventory from ISIS. This feature allows agencies to use other productivity tools for custom reporting other than those offered by ISIS. Application data is not available for downloading at this time. Embedded control characters that begins, modifies, or ends a function, event, or operation in the data can cause problems in downloading inventory.

Another ISIS feature is the ability to identify "sub-organizations" equivalent to a Division, Section or a Unit within an agency. This allows each agency and their sub-organizations to maintain their own specific inventory with the ability to upload to or download from ISIS. In order to use this feature, please contact IT Planning Manager at (602) 364-4790 or [ITplanning@azgita.gov](mailto:ITplanning@azgita.gov) with sub-organization names to change the profile your agency.

**MASS DELETE** – A new mass delete feature has been added to allow agencies to remove IT inventory by anyone of the category levels of inventory by Asset Group, Asset type, or Asset Code categories. This feature will work as follows:

1. After gaining access to your agency's IT Inventory, the user clicks on the "Mass Delete" command button.

2. Then click on the following drop down lists to select a category of products:
  - a. Asset Group - Select a Group name to delete all products under this Group.
  - b. Asset Type - Select a Type name to delete all products under this Type and Group.
  - c. Asset Code - Select a Code name to delete all products under this Code, Type and Group.
3. Additional delete features are available by selecting the "AND" criteria for deleting products by City, Location, Manufacturer, Models, and Versions (excluding serial number and asset tag).
4. When finished with the above selection criteria, click on "Search", the system will display all the inventory assets that match your criteria and provide a **Mass Delete of Assets** command button to click on.
5. Click on the **Mass Delete of Assets** command button and the system will respond with "**ARE YOU SURE YOU WANT TO DELETE THIS INVENTORY?**"
6. The user then clicks "**OK**" or "**Cancel**" to continue with deleting or no to cancel.
7. If "**OK**" is clicked by the user, the system will then ask for the user's "Password" to continue the mass delete feature.
8. Once the Password has been verified, ISIS will create and return an export file of all selected inventory to the user and delete all selected items from inventory.
  - a. ISIS will respond with the following system message, "**ISIS is creating a .csv export file for backup, please save to your computer MASS DELETE COMPLETED**" and the system will prompt the user with Open, Save or Cancel the .csv export file.
9. **WARNING:** This feature has been added to further help manage and refresh inventories on an as needed basis by state agencies. This is a powerful feature and should be managed by a trusted source. Should a Mass Delete be performed by mistake, the agency can always refresh inventory with an upload of the .csv backup file.

### Data Entry and Searching

Data entry is performed either online or via the upload function as mentioned above. An agency has the option of adding, editing or viewing existing software applications or inventory assets.

To add software applications, click on the ADD NEW APP command button. To update existing software applications, click on the VIEW/EDIT APP command button and the system will list current applications with an EDIT command button for updating.

To add inventory assets, click on the ADD NEW ASSET command button; model and version fields are available for tracking. To update existing inventory assets, click on the VIEW/EDIT ASSET command button, then click on the drop-down lists for Asset Group, followed by Asset Type, followed by Asset Code to modify existing inventory assets. Asset Groups, Types, and codes are provided under *IT Asset Types & Asset Codes* at <http://www.azgita.gov/planning/>.

**IT Manufacturer Naming Conventions** are located at <http://www.azgita.gov/planning/> and used in the ISIS application.

### Import File Format

To perform uploads of a large volume of inventory data, all fields are required to be in a specified order as identified in the *ISIS Required Import File Format* in a comma-delimited file (.csv). Select IMPORT INVENTORY ASSETS on the left side of the screen, then select the BROWSE command button to locate your .csv file, then select the UPLOAD command button for importing. Field names in a .csv file must be identified in the first row and in sequence (columns A through W) as defined by the *ISIS Required Import File Format* document located at <http://www.azgita.gov/planning/>. This document lists both optional and mandatory fields types with field lengths and required sequence.

## Helpful Hints

- A. **INVENTORING TECHNOLOGY** – ISIS is looking for a range of technologies to inventory that vary from enterprise-class mainframe-servers to individual workstations and hand-held computing devices that are vital to managing an effective inventory. Server devices include mainframes, midrange and network servers. Software technologies can range from graphics, to business continuity, to publishing, to network management, to business intelligence and a variety of others. Security technologies are just as vital with respect to network perimeter security products and internetworking devices such as intrusion detection/prevention, firewalls, anti-virus, routers, switches, hubs, etc. PC monitors are not required in the IT inventory.
- B. **SURPLUSED INVENTORY** – The disposition of an inventory item can be changed to SURPLUSED or other dispositions at any time and is requested that a change in disposition from CURRENT be maintained on ISIS until the roll-over occurs in May of a current year before deleting. Other dispositions are CURRENT, STORAGE, TRADE IN, NON-OPERATIVE, OBSOLETE, RISK MGMT (lost) and INTERAGENCY TRANSFER. The state will then be able to maintain a history of the life of a product(s).
- C. **QUALITY OF INVENTORY** - When inventory has been completed and as accurate as possible by September 30<sup>th</sup>, please change the inventory Status to SUBMITTED so that GITA will know to review and change status to either APPROVED or MODIFICATION REQUESTED. Once inventory has been changed to SUBMITTED, the agency is prohibited from making any further changes to the inventory until after final approval from GITA. Should an agency identify too much inventory as OTHER, GITA will most likely change the status to MODIFICATION REQUESTED and request the agency to further identify the inventory.
- D. **FISCAL YEAR** - Remember to enter fiscal-year in the last field of each inventory. If the year is omitted or incorrect, the record will not be added or stored in the wrong year. Inventory uploads conducted in September of 2009 are for Fiscal Year 2010, so fiscal year must contain 2010. Extra commas in a .csv file can throw off subsequent inventory fields accordingly, so be careful.
- E. **SERIAL NUMBERS** - are now required on all IT hardware products in ISIS and checked for a minimum length of seven (7) characters. If less than seven characters, suffix the number with a hyphen followed by the AFIS agency code (i.e., -HCA, -ADA, -GTA, etc.)
- F. **LICENSE NUMBERS** – are now required on all IT software products on ISIS and checked for a minimum length of seven (7) characters. If less than seven characters, suffix the number with a hyphen followed by the AFIS agency code (i.e., -HCA, -ADA, -GTA, etc.).
- G. **ASSET TAG NUMBERS** – are now optional for both IT hardware and software products.
- H. **MANUFACTURER NAMES** - Misspelled manufacturer names including extra spaces or with misplaced capital letters can cause inventory records to be rejected . Please refer to the current list of manufacturer at *IT Inventory Manufacturer Naming Conventions* located at <http://www.azgita.gov/planning/> for exact spelling.
- I. **SOFTWARE PRODUCT ALPHA LIST** - An alphabetical listing of current software products by ISIS is provided at the website under *IT Inventory Software Product Asset Codes*.
- J. **CONTROL FIELD CHARACTERS** - Do **not** use double quotes (") or the pipe (|) characters in any of the fields of the file or the entire file or record may be rejected. Online entry of MACs inventory have proven to be problematic, so use of PC for Asset Type is desirable due to control field characters.

- K. **UPS and Generators** are found under *Voice Power Equipment Asset Type* and the *Telecommunications Asset Group*.
- L. **Fax machines** are found under *Voice End User Device Asset Type* and *Telecommunications Asset Group*.
- M. **DUPLICATED INVENTORY** – Inventory assets with the same asset group, type, and code along with duplicate asset-tag-numbers or serial-numbers are rejected from ISIS.

**Contact Us**

Please contact the IT Planning Manager at (602)364-4790 or email to [ITplanning@azgita.gov](mailto:ITplanning@azgita.gov) if you have any further questions.