GSA FDCCI Inventory Template Guide

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Instructions

The Full Inventory tab contains information on all data centers previously reported by your Department and/or Agency.

Facilities that closed or are schedule to be closed by 2013 are highlighted in orange. Facilities highlighted in blue indicate an unrealistic closing stage in relation to the Target Date for Closure. Please update the Closing Stage or Target Date.

To assist agencies in quickly identifying missing or potentially invalid data, several calculated fields have been provided.

To ensure the data we have in our data base is accurate and up to date, please:

1. Verify the data in Columns A thorough BE are accurate.
2. Update Column E with one of the following selections
   a. Select "Valid" If the information is valid and no modification is necessary
   b. Select "Modified" if the information in any cell has been changed
   c. Select "Added" when adding information for a data center not on the provided list
   d. Select "Invalid Record" if the facility was misclassified as a data center, server room, or closet.
   e. Select "Future Facility" when adding a data center that is not currently operational.
3. If you have a data center listed that is no longer closing, clear out the values in Column H and I.
4. Update Columns J-O for data centers that are marked Closed in Column I - Phase of Closure
5. Do not enter zero or blank out values for data center records that are removing equipment or closed.
6. Verify there are no errors in the data. Certain columns will change to red when the data is either incomplete or outside industry norms for the fields being calculated.
7. Please note: Columns BF and BG contain unique database identification numbers. Please do not modify or delete these numbers
8. Column BH, YEAR, is for sorting purposes only. Not input is required.

Calculated fields are marked with an asterisk (*) and do not require any input in the template.

All fields are pre-filled unless the field is calculated or otherwise specified.

Data Center Information

Department Name

Agency / Component Name

Select a Component for the data center. If you are not reporting components, select the top level Agency/Dept. name. If the component does not exist, assign the top level Agency/Dept. name; and contact the FDCCI PMO to add additional components.

Data Center Name

Enter the name of the data center.

Office

OPTIONAL FIELD: Enter the office, business line, or sub-bureau. This field is for internal tracking purposes only. Data from this field will not be reported or factored in the TCO Model.

Record Validity

*** This field is not pre-filled ***
<u>Drop down</u>: Valid Facility, Invalid Facility, Added Facility, Modified Data, Duplicate record, Future Facility. Invalid facility is defined as a facility that was inaccurately classified as a Data Center, Server room or closet. Future Facility is defined as a facility scheduled to open in the future. Include as much information as possible. Records marked as Invalid Facility or Duplicate Record will be ignored.

Shared Services

Shared Server Type

<u>Drop down</u>: Provider - Agency Only, Provider - Government Wide, Customer/Tenant.
-Select "Provider - Agency Only" if the data center is providing service and/or space to components within its Department/Agency only. *Only select Agency Owned, GSA Owned, Lease and Retrofit, Turnkey Lease as the Ownership Type.*
- Select "Provider - Government Wide" if the data center is providing service and/or space across Government. *Only select Agency Owned, GSA Owned, Lease and Retrofit, Turnkey Lease as the Ownership Type.*
-Select "Customer/Tenant" if the data center is collocating within or outsourcing its data center operations to another agency or component's data center. *ONLY select Collocated or Outsourcing to other Agency as the Ownership Type.*
-If the data center is neither a Provider nor a Customer/Tenant, leave this field blank. *Only select Agency Owned, GSA Owned, Lease and Retrofit, Turnkey Lease, Outsourcing to Contractor, Public Cloud Provider as the Ownership Type.*

Data Center Provider Name

If you selected Customer/Tenant as the Shared Service Type, enter the Data Center Name of the providing data center. If you are unsure of the data center name, provide the Agency, Component, and Data Center of the provider. Please use the format of Agency-Component-DataCenter, eg. DHS-FEMA-HQ. *Do not complete this field if the Type is Provider or blank.*

CONSOLIDATION EFFORT

Target Data for Closure (FY)

Drop down: Select the target date for closure (Fiscal Year) with QQ / YYYY formats. VALUES = 2010, Q1/2011 - Q4/2019. If already closed, indicate timeframe when closure occurred. If not targeted for closure leave blank. If quarter unknown use Q4.

Phase of Closure

Drop down: Stage 1: Inventory, Stage 2: Application Mapping, Stage 3: Migration Planning, Stage 4: Migration Execution, Stage 5: Equipment Removal, Closed, Considering. If there are several phases being worked in parallel, select only the highest Closing Stage that has been completed.

CLOSED DATA CENTER INFORMATION

Real Property Disposition

Drop down: Dispose at close, Dispose at later date, Repurpose. *Only required if the data center is closed.*

Real Property Disposition Date

Drop down: Please indicate the year of property disposition. *Only required if the data center is closed.*

Floor Area Eliminated or Repurposed

Enter the total floor area (in sq.ft) eliminated or repurposed as a result of this data center closing. *Only required if the data center is closed.*

Total De-commissioned Servers

Enter the total number of servers de-commission from this closed data center. *Only required if the data center is closed.*

Total Servers Moved to Other Data Centers

Enter the total number of servers removed from this closed data center and relocated to another facility. *Only required if the data center is closed.*

Overall FTE Reduction

Enter the total FTE reduction as a result of this data center closing. *Only required if the data center is closed.*

Data Center Facility Information

Street Address

Street Address2

Enter the suite, room, or building number. In some cases the field may contain amplifying information about the facility.

City

State

Zip Code

Country

Gross Floor Area (SqFt)

This is what is commonly referred to as white space or raised floor space. Please indicate the total sq. ft. available for IT equipment. Do not include office space, mechanical rooms or storage areas. Minimum is 8 (equivalent to 1 rack).

Data Center Classification*

Calculated field: Based on the gross sq.ft. entered. This field shows how record will be classified.

Cost ($ / sq.ft. / year)

Please indicate the Cost per sq.ft. per year paid for the facility.   Maximum is $2,000.

Electricity Included in Cost (Y/N)

Drop Down: Please indicate if Electricity is included in the lease cost.

Ownership Type

Drop down: 1: Agency Owned, 2: GSA Owned, 3: Lease and retrofit, 4: Turnkey lease, 5: Collocated, 6: Outsourcing to contractor, 7: Outsourcing to other agency, 8: Public Cloud Provider

Provider Services to Other Agencies

Drop-down: Please indicate if the data center is providing services to other agencies that are not part of the same Cabinet level Department. Other agency data is not required if the facility is not owned by the agency. Include contracted or Cloud providers.

% of Services paid by Other Agencies

Enter the total percentage of services paid for by an agency outside the department. Do not include co-location of multiple components within a single agency. *Required if the data center is providing service to other agencies.*

List of Agencies Serviced

To ensure continuity, provide the names of the agencies hosted in each facility. *Required if the data center is providing service to other agencies.*

Provider Name

If using a non-agency provider facility, please indicate the name of the provider.

Data Center Tier

Drop Down: 1: Tier I, 2: Tier II, 3: Tier III, 4: Tier IV, 5: Server Room/Closet, 6: Other Room/Lab, 7: Unknown, 8: Public Cloud Provider

of FTE related to data center operations

Defined as government and contracted personnel associated with the operations and maintenance of the Data Center at or below the operating system level. If the responsibilities are a fraction of a person or several person's time, estimate the hours per year attributed to data center operations and divide by 2080 (workable hours per year).

Average Annual FTE Cost

Average annual cost paid for IT personnel (government and contractor) associated with Data Center Operations. (Fully Loaded)

ENERGY

Electricity Metered (Y / N)

Drop Down: Please indicate if the facility has metering capability.

Total Data Center Power Capacity (kW)

This is the total power capability of the data center, usually measured at the main breakers.

Average Data Center Electricity Usage (kWh)

Total power consumed by the data center per hour. This includes power consumed by the white space and auxiliary equipment.

Total Data Center I.T. Power Capacity (kW)

Total power available to the white / raised floor space. This can often equal to the UPS and / or Generator Set rating.

Average I.T. Electricity Usage (kWh)

Total power consumed by the IT equipment. This is typically measured at the UPS / PDU.

Cost per kWh

If known, provide the cost per KWh. If unknown, leave blank. Maximum cost is $0.50.

Watts per Sq.Ft.*

Calculated field - provided as a means to quickly validate the data entered. Values for commercial office space can be as low as 7W per sq.ft. while high capacity purpose built data centers can exceed 250.   Field changes color when required data is incomplete. Data is not stored in database. No input required.

Power Usage Effectiveness (PUE)*

Calculated field - Calculation provides a rough estimate of the facilities PUE. Average values are typically around 2.0. Values can be between 1.4 for highly efficient data centers and more than 3.5 for inefficient.   Field changes color when required data is incomplete. Data is not stored in database. No input required.

HARDWARE

Current Rack Count (#)

This is the total number of racks that are in the data center. Please include racks used for backup, storage, network and wiring gear. Only input your portion regardless if you are a provider, customer, or neither.

Sq. Ft. per Rack*

Calculated field - Based on total sq.ft. and number of racks being reported. According to APC White Paper #144, the average rack consumes 28 sq.ft. Values can be below 28 sq.ft., but are rarely found outside high capacity, purpose built facilities. Field changes color when required data is incomplete. Data is not stored in database. No input required.

Mainframes (IBM or Compatible)

Enter the number of IBM mainframe systems. Only input your portion regardless if you are a provider, customer, or neither.

Mainframes (Other)

Enter the number of non-IBM mainframe systems. Only input your portion regardless if you are a provider, customer, or neither.

Windows Servers

Servers with Windows based OS loaded directly on the server. If using blade servers with one OS per blade, each blade should be counted as one server. Do not include Hyper-V hosts. **Only input your portion regardless if you are a provider, customer, or neither.**

Unix Servers

Servers with Unix based OS loaded directly on the server. If using blade servers with one OS per blade, each blade should be counted as one server. Do not include Virtualization hosts. **Only input your portion regardless if you are a provider, customer, or neither.**

Linux Servers

Servers with Linux based OS loaded directly on the server. If using blade servers with one OS per blade, each blade should be counted as one server. Do not include Virtualization hosts. **Only input your portion regardless if you are a provider, customer, or neither.**

HPC Cluster Nodes

Enter the total number of HPC (High Performance Computing) Cluster Nodes. Do not include HPC Cluster Nodes as Virtual Hosts. **Only input your portion regardless if you are a provider, customer, or neither.**

Other

Servers that cannot be classified in one of the above categories. **Only input your portion regardless if you are a provider, customer, or neither.**

Total Physical Server Count (#)*

<u>Calculated field</u> - Includes all physical servers being reported for the facility. This count includes the physical VM hosts.   Field changes color when required data is incomplete. Data is not stored in database. No input required.

VIRTUALIZATION

Total Virtual Host Count (#)

Total physical servers dedicated to providing a virtualization layer to guest operating systems. Do not include HPC Cluster Nodes. **Only input your portion regardless if you are a provider, customer, or neither.**

Total Virtual OS Count (#)

Total virtualized operating systems residing on virtual hosts. **Only input your portion regardless if you are a provider, customer, or neither.**

Total Operation Systems Count (#)*

<u>Calculated field</u> - shows total operating systems (physical and virtual) currently being reported for the facility. VM host operating systems are not included. Data is not stored in database. No input required.

NETWORK STORAGE

SAN/DAS/NAS – Total (TB)

Total Network storage available. Please do not include drive space in servers. **Only input your portion regardless if you are a provider, customer, or neither.**

SAN/DAS/NAS - Used (TB)

Total Network storage used. **Only input your portion regardless if you are a provider, customer, or neither.**

Percent Used*

<u>Calculated field</u> - Shows percentage of network storage currently used.   Field changes color when required data is incomplete. Data is not stored in database. No input required.