2020 IRDR Part Four
IT Inventory
Supplemental Instructions

Guidance for Texas State Agencies and
Institutions of Higher Education

Submission Deadline, March 31, 2020

Texas Department of Information Resources

Contents

Key Information

Background

The Information Resources Manager (IRM) of each Texas state agency and institution of higher education (IHE) is required to conduct an IRDR every two years. DIR is providing Part 4 supplemental instructions to explain the inventory required under Texas Government Code, Sections 2054.068 and 2054.0965. Primarily, these instructions provide guidance on how to enter the information in the Statewide Portal for Enterprise Cybersecurity Threat, Risk and Incident Management (SPECTRIM).

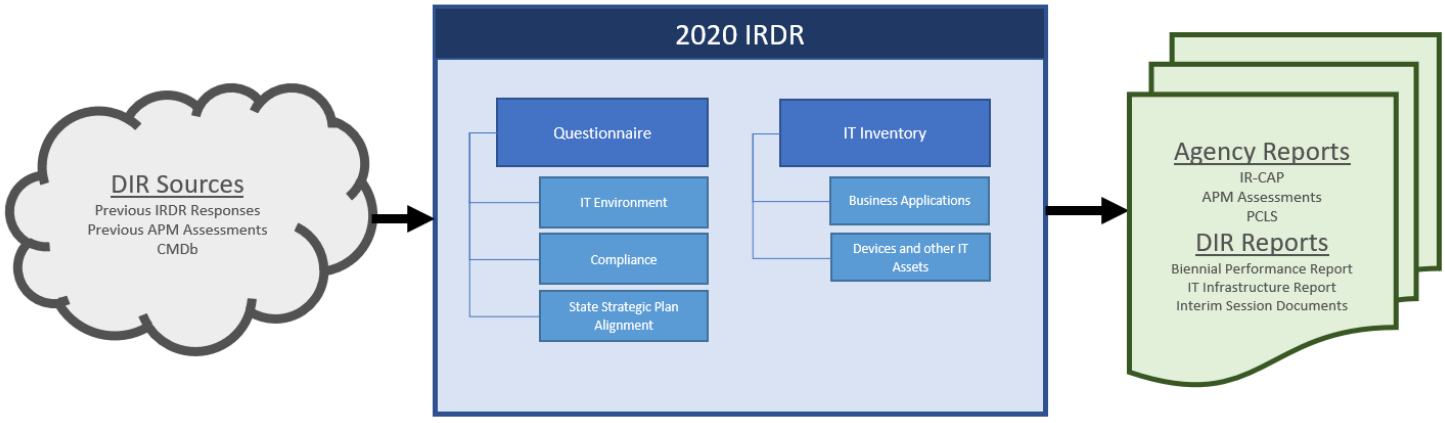
DIR uses the information from this inventory to provide a statewide or enterprise perspective of information technology infrastructure and associated business applications used by state agencies. The inventory provides information for several required reports, including an assessment of security and operational risks.

DIR will prepopulate some information to ease the reporting burden for agencies. However, it is the agency's responsibility to ensure that inventories are accurate and completed. DIR has added additional fields to provide agencies with more in depth tools and the ability to track that information.

IHEs are not required to enter their inventory in SPECTRIM, but DIR highly encourages participation as this tool can help IHEs better manage their technology inventory and serve as a central repository.

Certain information concerning the vulnerability of systems collected for the purpose of 2054.068 will be treated as confidential through an exception granted on Chapter 552, Government Code. This includes the information collected in Part 4 – IT Inventory. The agency should take care to not provide system-comprising information in text-responses in the general IRDR. DIR will comply with the Texas Public Information Act for public information requests but will strive to ensure no system-comprising information is released in the process. Per Texas Government Code, section 552.139, Information is excepted from the requirements of Section 552.021 if it is information that relates to computer network security, to restricted information under Section 2059.055, or to the design, operation, or defense of a computer network.

Reporting Overview



Getting Started

Overview

The inventory in SPECTRIM is broken up between "Devices" and "Applications." These two categories require different information.

Devices

- There are several input fields shown but not all information is required. Some fields are optional or read only. Required fields are marked with a red asterisk.
- It is important to include criticality information including risk metrics, data types, and monitoring information for active application.

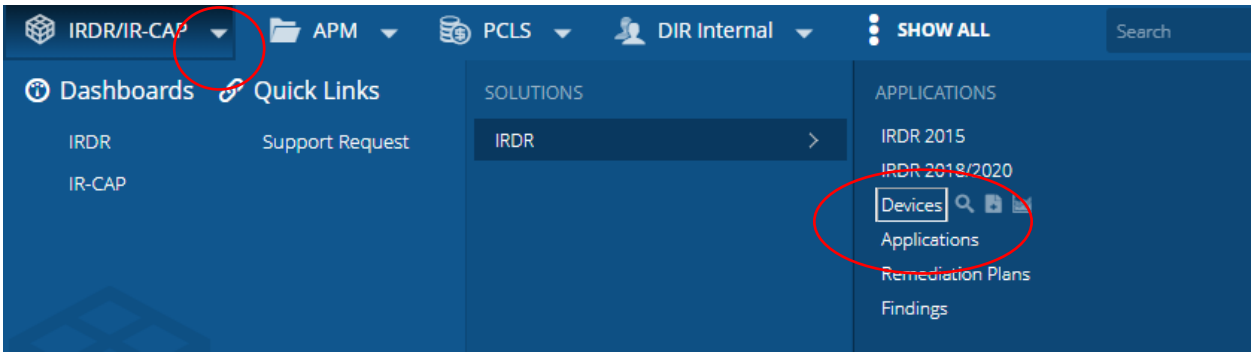
Applications

- Agencies can designate an application to be *In Scope for APM* and assign an APM coordinator for that application.
- If an agency would like to complete an APM assessment on the application, then select *Generate New APM Assessment.*

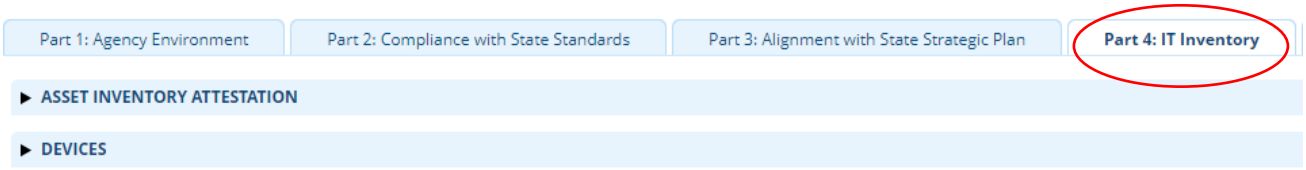
Reviewing and Adding a Record

There are two ways to review and update the inventory:

1. For an overview of all devices, select 'Devices' or 'Applications' from the IRDR menu at the top of the page. This method utilizes in-line edit (similar to an Excel document).

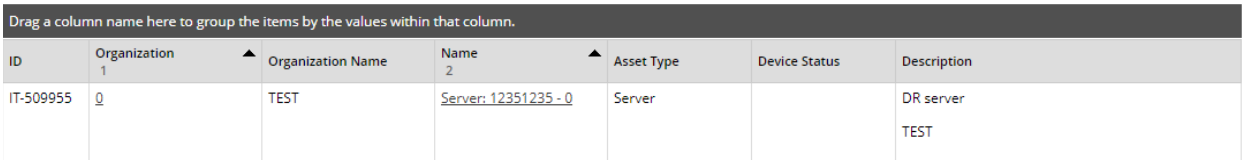


2. 'Devices' and 'Applications' can also be accessed from the IRDR itself by selecting the 'Part 4: IT Inventory' tab and expanding the 'Devices' or 'Applications' sub-sections.

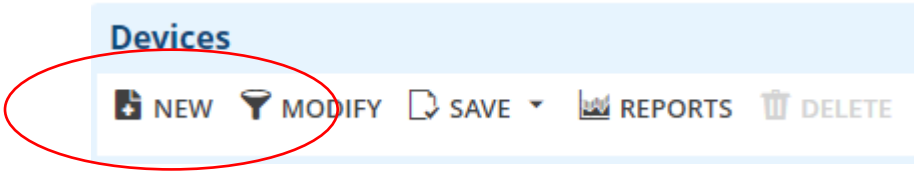


Method 1: In-Line Editor

Once you select Devices or Applications you will be taken to the in-line editor which functions like Excel and allows you to review the data in an overall view. It also allows you to quickly make edits to certain fields. If you select the name of the device or application, it will open the individual editor.



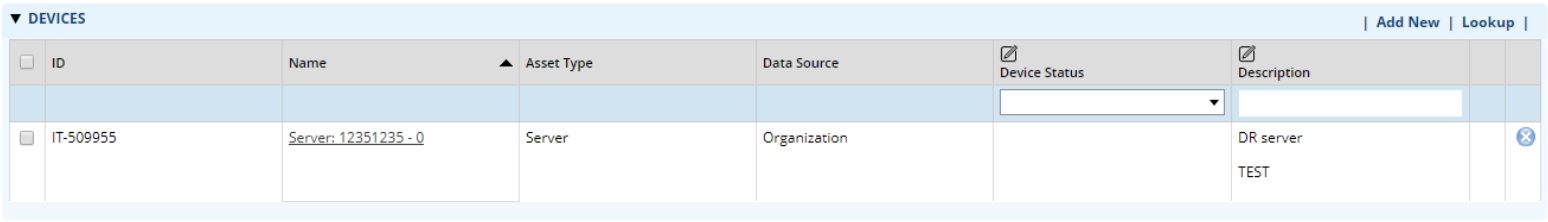
To add a device from the in-line editor, select the 'New' option on the top left of the screen.



This will redirect you to the new record page.

Method 2: In IRDR Editor

From the IT Inventory home section, expand the 'Devices' or 'Applications' sub sections. This will show a full list of all applications and devices that were carried over from the CMDb or from the previous IRDR.



Select the name or go to the individual editor or select 'Add New' on the right side to create a new record. Click into the hyperlink of the device/asset name to see all the associated record fields. It is best practice to save the IRDR questionnaire before navigating to another record such as a device or application record.

Devices and Other IT Assets Inventory

General Information

DIR is required to conduct an inventory of each state agency's information technology infrastructure, including agency servers, mainframes, major databases, cloud services (collected as part of the Business Applications inventory), managed infrastructure, and other IT equipment. In SPECTRIM, this inventory is collected in the 'Devices' and 'Applications' modules and includes devices as well other IT assets such as databases that are not business applications.

DIR has prepopulated inventory information from recent IRDRs and, for Data Center Services (DCS) agencies, some information from the Shared Technology Services CMDb server, network gear, and mainframe inventory.

Agencies must review the devices inventory list to ensure it is complete and add any NEW devices or other IT assets or items that are outside of the scope of DCS; please change the status for retired and duplicate devices or other IT assets.

Include as much additional detail as possible; new fields have been added to include the Asset Value, Device Role, Deployment Location, Technology Details, Related Applications, Risk Metrics, and Monitoring Details.

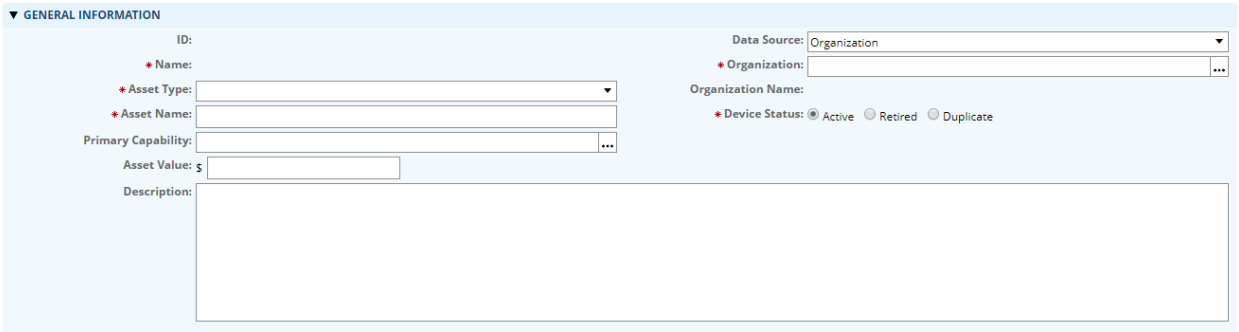
After you complete the update of your inventory, be sure to certify that all agency assets and applications are listed in SPECTRIM by checking the CONFIRMED box in the 2020 attestation section.

Required Fields

The General Information section contains most of the required fields. These include:

- Asset Name
- Asset Type
- Organization
- Device Status

Many of the input fields shown are optional for agencies to complete but are encouraged as doing so can help the agency with planning. Some fields may not be applicable for a given asset type. As a reminder, many of the fields will be prepopulated from previous IRDRs or from the CMDb.



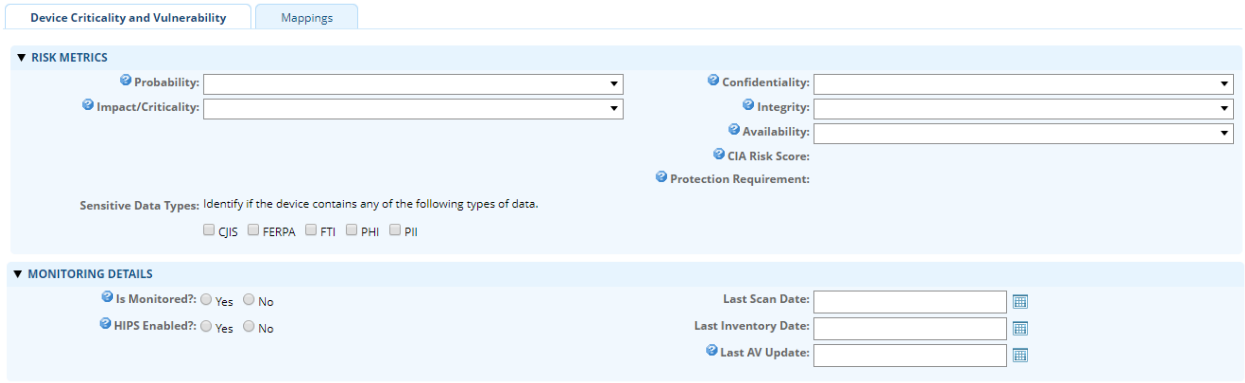
There are several conditional fields that are generated based on the asset type selected. Asset types include:

- A/V Equipment
- Database
- Firewall
- Hardware
- Load Balancer
- Mainframe
- Network Storage Device
- Other Network Asset
- Printer
- Router
- Security Device
- Server
- Storage Sever
- Switch
- Workstation

While there are several types of assets available for agencies to select, agencies are not *required to* report on all of them all. Agencies are only required to report on *servers, mainframes, cloud services (part of the Business Application Inventory), and other information technology equipment.*

Device Criticality and Vulnerability

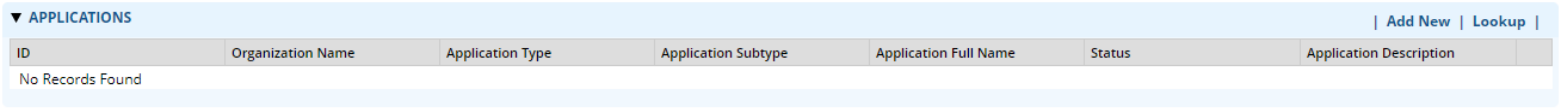
While not required, it is important to include information on risk metrics. Responses to these questions will help to generate your risk score for the asset.



DIR has developed several reports in the SPECTRIM portal to provide insight into the risk profile of agency assets. Completing the risk metrics section can help identify protection requirements of agency assets.

Associating Applications

It is important to associate the agency's business applications with agency devices. If the associated application you are attempting to link to is not in the lookup field, then you can either add the application by clicking "Add New" or you can add the application later and link the devices from the application record. To do so, navigate to the 'Applications' sub-heading on the device you wish to associate with an inventoried device. From there you will need to select 'Look up' to generate a list of business applications, then select witch applications are associated with that device. By doing so, this



provides agencies with a wholistic view of how their applications are mapped to servers and locations.

Associating devices to business applications can provide insight into the security posture and potential impacts of infrastructure changes on agency applications.

Business Applications Inventory

General Information

Business Applications Inventory

A Business Application name is the high-level label used by an agency business and IT organization to identify a group of functions provided by one or more systems to accomplish the specific business needs of the agency. A Business Application is typically a combination of integrated hardware and software (including data and applications), internally developed custom systems, commercial off the shelf (COTS) applications, and/or customized third-party systems.

The Applications Inventory application in SPECTRIM is a repository of all business applications used by the organization to perform business operations. Examples of applications include payment intake systems and customer information systems.

Organizations can use this feature to: track risk rating, business impact, licensing details, and personnel for various applications; identify risk vulnerabilities; map related software applications to the business processes they support; and classify and prioritize applications based on their value and criticality.

In Part 4 of the IRDR, DIR requires state agencies to validate their business applications in SPECTRIM.

Business Applications Validation

Application validation helps agencies prepare for an Application Portfolio Management (APM) assessment process and provides an updated list of agency business applications to link to your Device Inventory. It assists with the Prioritization of Cybersecurity and Legacy Systems Projects required by Section 2054.069.

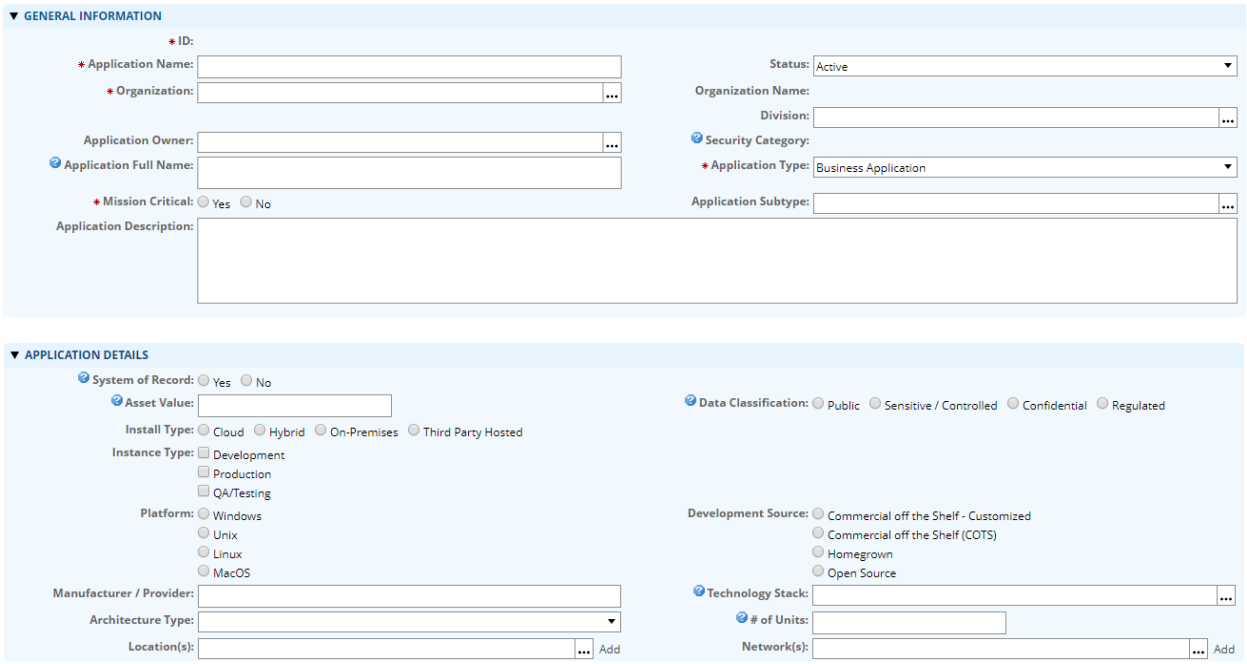
Business applications that have been previously added in the SPECTRIM portal (previous IRDRs) are included in the inventory; within the application records, the agency can make the determination of whether to generate a new Application Portfolio Management assessment (APM assessment) for that application. Additionally, the agency can make the determination if the application should be included in the scope of the APM process itself. Applications that do not have an APM assessment or have not had an APM assessment performed in over 4 years will not be able to be linked to PCLS questionnaires. Therefore, it is beneficial to ensure that applications that may be associated to future PCLS project funding requests have a current and accurate APM assessment.

Any new business applications that were not included in the 2018 APM process will be required to have an APM assessment completed in order to be included in PCLS project funding requests.

Once all applicable business applications have been entered and reviewed, agencies will need to check the CONFIRMED box within the business application attestation section on the Part 4: IT Inventory tab within the IRDR questionnaire.

Reviewing Business Applications

Agencies validated their business applications prior to the launch of the 2018 IRDR. Agencies should review the existing business applications and ensure the details and status of the applications are accurate.



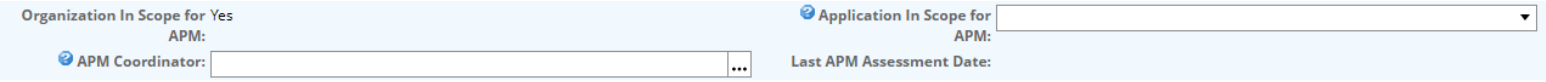
Required Information

As with the devices inventory, the General Information section contains most of the required fields. For business applications, this includes:

- Name
- In Scope for APM
- Generate New Assessment
- Application Owner
- Mission Criticality

In Scope For APM & Generate New APM Assessment

On each of the business applications entered, there is a dropdown menu for "In Scope for APM" where the agency can designate if each application is in scope and assign an APM coordinator for that application.

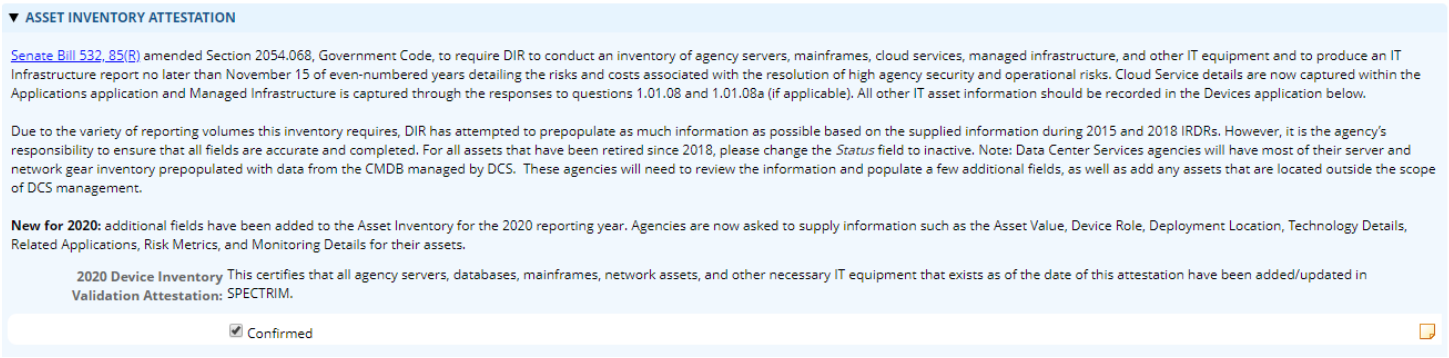


If an agency would like to complete an APM assessment on the application, then select "Generate New APM Assessment."

A Current APM assessment (completed within the last four years) is required for PCLS questionnaire submission. Agencies can view previous APM assessments and application risk assessments within the respective sections in the application record by clicking on the hyperlinked key field of those records.

Attestation and Completion

Agencies will need to confirm that the information is correct after completing the device and business applications inventories. There is an attestation checkbox on **both** the inventory sections.



Once both sections are confirmed the inventory portion of the IRDR is complete. After saving the questionnaire, the part 4 progress indicators will change to green check marks.

If you have any questions about the content of this document, please email irdr@dir.texas.gov.