| Title | Web Inventory Toolbox | Story ID | ######## |
| --- | --- | --- | --- |
| User Story |  |
| Acceptance Criteria | * As a Portal or AGOL admin, I can list services and web applications and track dependencies so that I can effectively administer applications and services. |

The WebInventoryToolbox contains tools to summarize ArcGIS services and applications for convenient user access and query.

Graphical user interface, text, application, email

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The tool requires the **arcgis** and **openpyxl** packages for Python. The script will automatically check that the **arcgis** package is at least version 2.0.1.

# Portal Services

## Uses

This tool searches the portal for services. It iterates through folders and returns detailed information about the services, including data source details. Detailed results require an account with portal administrator permissions.

This tool can also be called when running the Web App or Web Inventory tools. Those tools incorporate the output from the Portal Services tool as a formatted worksheet within the final Excel spreadsheet.

### Interface

In ArcGIS Pro, enter the required parameters, then click Run to begin the process. Access more details about parameters using the blue info button as shown below.

Graphical user interface, application

Description automatically generated

*Note: The password is hidden, but not encrypted. Please be careful with administrator credentials.*

### Results

Below is a list of columns returned from the tool and example values for each.

* Title
  + X
* URL
  + X
* SourceMap
  + C:\X
* SourceLocation
  + X
* Status
  + STARTED
* Description
  + Service containing ...
* Tags
  + []
* Categories
  + /Categories/
* DataSources
  + \*DATABASE=D:\arcgisserver\directories\

### Queries

Administrators can search the resulting table to identify services using particular features, servers, or even usernames. In the example table below, the user navigated to a cell in the DataSources column, then used Ctrl+Shift to highlight the entire column. The user then used Ctrl+F to open the Find and Replace window. The user searched for FunctionalSystem to review which services may point to feature classes with that name.

<insert image>

The source .mxd is also available for many map, feature, and image services, and Portal categories can also be searched from the table in Excel.

When the output .txt file is formatted, as the tools below do automatically when adding the Portal Services to Excel, it is simple to use the filter Graphical user interface, text, application, email

Description automatically generated to only show rows meeting specific criteria in a given column.

<insert image>

<insert image>

## Assumptions and Limitations

* This tool will only return comprehensive information if the user has full permissions on the Portal. Running the tool with an account with lesser permissions will return partial results from the Portal.
* There may be multiple service types enabled for a MapService, but only FeatureService will be shown in addition to MapService. WFS, WMS, KML, LRS, and other formats are not included in the table at this time.
* <insert image>

# Web App Inventory

## Use

The Web App Inventory tool functions slightly differently when run in ArcGIS Pro vs a stand-alone Python script. In ArcGIS Pro, the tool inventories the active Portal or ArcGIS Online account. Changing the active portal or the username used to access the active portal requires signing out or switching portals from the ArcGIS Pro interface. In Python, the user provides a portal object to the tool; examples are in the Python help for the tool.

<insert image>

### Interface

In ArcGIS Pro, enter the appropriate parameters to run the tool. The Template Spreadsheet parameter will default to the WebApps\_Autopopulate.xlsx spreadsheet in the same directory as the .pyt file. This parameter normally does not need changed. The Output Folder must be entered so that the .txt files for each web app type can be saved. The Existing Portal Service Table and Create New Portal Service Table and Load Data parameters are both optional. The Create New Portal Service Table option is only functional for Enterprise Portal – not for ArcGIS Online. Only one of the parameters can be used, because if the portal service table is provided, it need not be regenerated. Access more details about specific parameters using the blue info button that appears when hovering over a parameter. Access the Help for the tool using the blue question-mark icon.

After entering the appropriate parameters, click Run to begin the process.

Graphical user interface, text, application, email

Description automatically generated

### Results

This tool searches the active portal in ArcGIS Pro for web mapping applications and returns details in a user-friendly format. It also optionally provides administrative details from the Portal Services tool. The tool requires the template Excel spreadsheet LaDOTD\_WebApps\_Autopopulate.xlsx. The template loads by default as long as it is placed in the same folder as the script toolbox. Users can navigate to pages for individual web mapping applications from the Table of Contents sheet, then return to the Table of Contents using the *Click to Return to TOC* link at the bottom of each detail sheet in the workbook.

<insert image>

### Queries

If the Portal Services tool results are included in the output and the active portal is the DOTD enterprise portal, a sheet called PortalServiceDetails will be added to the output spreadsheet and a link to that sheet will be included in the list of sheets in the Table of Contents. For each web application, an additional column called **Service Details** will be added and populated with a hyperlink to LayerDetails if the Source URL is found in the PortalServiceDetails sheet. The new column will return #N/A if the Source URL is not found. If you click on a LayerDetails link and wish to return to the previous worksheet, you can use the F5 key, then Enter.

<insert image>

## Assumptions and Limitations

This tool will only return detailed information if an administrator account is logged into ArcGIS Pro when running the tool.

# Web Service Inventory

## Use

The Web Service Inventory tool functions slightly differently when run in ArcGIS Pro vs a stand-alone Python script. In ArcGIS Pro, the tool inventories the active Portal or ArcGIS Online account. Changing the active portal or the username used to access the active portal requires signing out or switching portals from the ArcGIS Pro interface. In Python, the user provides a portal object to the tool; examples are in the Python help for the tool.

<insert image>

### Interface

In ArcGIS Pro, enter the appropriate parameters to run the tool. The Template Spreadsheet parameter will default to the WebServices\_Autopopulate.xlsx spreadsheet in the same directory as the .pyt file. This parameter normally does not need changed. The Output Folder must be entered so that the .txt files for each web app type can be saved. The Existing Portal Service Table and Create New Portal Service Table and Load Data parameters are both optional. The Create New Portal Service Table option is only functional for Enterprise Portal – not for ArcGIS Online. Only one of the parameters can be used, because if the portal service table is provided, it need not be regenerated. Access more details about specific parameters using the blue info button that appears when hovering over a parameter. Access the Help for the tool using the blue question-mark icon.

After entering the appropriate parameters, click Run to begin the process.

Graphical user interface, text, application, email

Description automatically generated

### Results

This tool searches the active portal in ArcGIS Pro for web services and returns details in a user-friendly format. It also optionally provides administrative details from the Portal Services tool. The tool requires the template Excel spreadsheet WebServices\_Autopopulate.xlsx. The template loads by default as long as it is placed in the same folder as the script toolbox. Users can navigate to pages for individual services from the Table of Contents sheet, then return to the Table of Contents using the *Click to Return to TOC* link at the bottom of each detail sheet in the workbook.

<insert image>

### Queries

If the Portal Services tool results are included in the output and the active portal is the DOTD enterprise portal, a sheet called PortalServiceDetails will be added to the output spreadsheet and a link to that sheet will be included in the list of sheets in the Table of Contents. For each web service, an additional column called **Service Details** will be added and populated with a hyperlink to LayerDetails if the Source URL is found in the PortalServiceDetails sheet. The new column will return #N/A if the Source URL is not found. If you click on a LayerDetails link and wish to return to the previous worksheet, you can use the F5 key, then Enter.

<insert image>

## Assumptions

This tool will only return detailed information if an administrator account is logged into ArcGIS Pro when running the tool.

The tool will only create the PortalServiceDetails when logged into Portal (not AGOL).

## Troubleshooting

Please log in to ArcGIS Pro before trying to access or run the tool.

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Description automatically generated

## Proposed Enhancements

* Modify the Services and Web Apps output to specify the portal or ArcGIS Online URL instead of the agency name.
* <insert image>
* Instead of “No Layer URLs”, modify the script and output sheet to specifically handle utility services as opposed to just map/feature services.

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| Version # | Created By | Created Date | Approved By | Approved Date | Reason |
| --- | --- | --- | --- | --- | --- |
| 1.0 | Alison Mynsberge | 7/27/2022 |  |  |  |
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