The DATIM Interface

The DATIM 7.0 interface includes the basic features described here.

**DATIM Navigation Menu**
Provides links to each of the major areas of DATIM – Home, ATIM, DTIM, SIT, and DCS – and is your way of navigating through the application.

**Tools Requiring Internet Explorer:**
- For more information related DATIM, select the About DATIM link.
- To access administrative tools, administrative users can select the Admin Tools link.
- Select the User Survey link to complete a customer satisfaction survey.
- Select DATIM Training to be notified of future DATIM training opportunities.

**Last Modified**
Look here to see how recently the application was modified.

**Disclaimers / Privacy Policy**
Click these links to read the web app’s disclaimers and privacy policy.

**DATIM URL**
To launch the application, enter the DATIM URL, https://apps.fs.usda.gov/DATIM/Default.aspx, in the address bar of Internet Explorer, the recommended browser.

**Login**
To access advanced features, click LOGIN and enter your Forest Service Active Directory and/or Level 1 eAuthentication user name and password.

**Design and Analysis Toolkit for Inventory and Monitoring (DATIM)**

**Welcome to DATIM!**
The Design and Analysis Toolkit for Inventory and Monitoring (DATIM) is a suite of software tools used for designing inventory and monitoring programs and analyzing the results of those programs.

To get started, select one of the tools below.

- **Analysis Tool for Inventory and Monitoring (ATIM)**
  Generate reports of estimate summary attributes for an area of interest and survey year. Users can select existing analysis datasets for use in reporting. Advanced users (login required) can create new analysis datasets. **Note:** Internet Explorer is required to create new analyses.

- **Design Tool for Inventory and Monitoring (DTIM)**
  Design an inventory and monitoring plan to address specific information needs by identifying objectives, questions and metrics.

- **Spatial Intersection Tool (SIT)**
  Perform spatial intersections between plot-based data and user-selected geospatial layers, and return map attributes for use in ATIM summaries.

- **DATIM Compilation System (DCS)**
  Augment and enhance existing DATIM datasets with additional attributes for analyses and report generation. Requires login and advanced permissions. Multi-user operation is not allowed.

With the exception of the Compilation system, you do not need to login to use DATIM. To access advanced features, such as saving your work to the DATIM server, please login.
Executing DATIM in Internet Explorer

To get started, launch the DATIM application in Internet Explorer, the preferred web browser.

**DATIM URL**
To get started with DATIM, enter
in the Internet Explorer address bar and launch DATIM.
The DATIM Welcome Page

When you launch DATIM in your web browser, you will land on the Welcome to DATIM home page. This page welcomes you to the DATIM application and briefly describes its four tools. Easy access to each tool in DATIM is available from this page.

Welcome to DATIM!
To access the DATIM tool of your choice, click on Analysis, Design, Spatial Intersection, or Compilation buttons. You will then be taken to the tool's landing page. Alternatively, the tools can be accessed from the DATIM navigation menu (not shown in this image).
Logging into DATIM

DATIM users are encouraged to login to DATIM using their Forest Service Active Directory (FS AD) or their Level 1 eAuthentication (eAuth) user name and password. More options and features become available to logged-in users. DATIM may be used with Guest User permissions and basic features if you choose not to login. If this is your first time logging into DATIM, you are granted the permissions associated with the Registered User role.

1. **The LOGIN Button**
   Click the LOGIN button in the top right corner of the application.

2. **The Login Form**
   When the Login form opens, insert your FS AD user name and password into the appropriate fields in the Active Director Users section. Select Login to use the DATIM application.

   If you are using a Level 1 eAuthentication account, follow the link under the eAuthentication Users section. A link is also provided in this section if you need to register for a Level 1 eAuthentication account.

   **About the Registered User role:**
   - The role granted to users with Forest Service Active Directory or Level 1 eAuth access
   - May access ATIM, SIT, and DTIM
   - Granted the same access as the Guest User along with the following:
     - May copy an existing ATIM report design
     - May save DTIM projects and reports to the application server
     - May create custom DTIM modules
     - May add/delete SIT attributes to an ATIM analysis.

   If you believe you should be promoted to an administrative user role, send us an email at datim@fs.fed.us.
The Analysis Tool for Inventory and Monitoring (ATIM) provides a nationally consistent application for analyzing resource inventory and monitoring data.

ATIM is used to derive estimates for attributes associated with vegetation to meet information needs on National Forests and surrounding landscapes.

Accessing ATIM
Select ATIM in the navigation menu to open the ATIM Welcome page. Alternatively, from the DATIM Welcome page, you can select the Analysis button.

Getting started with ATIM

Welcome to DATIM!

The Design and Analysis Toolkit for Inventory and Monitoring (DATIM) is a suite of software tools for designing and implementing programs and analyzing the results of those programs.

To get started, select one of the tools below.

**Analysis Tool for Inventory and Monitoring (ATIM)**
Generate reports of estimate summary attributes for an area of interest using analysis datasets for use in reporting. Advanced users (login required) need to create new analyses.

**Design Tool for Inventory and Monitoring (DTIM)**
Design an inventory and monitoring plan to address specific information needs.

**Spatial Intersection Tool (SIT)**
Perform spatial intersections between plot-based data and user-selected areas in ATIM summaries.

**DATIM Compilation System (DCS)**
Augment and enhance existing DATIM datasets with additional attributes. Login and advanced permissions. Multi-user operation is not allowed.
The ATIM Report Wizard

With ATIM, you can run any of the standard reports for a given population of interest and inventory year (an analysis dataset). You can also create custom reports based on your selected criteria.

Standard reports can be run against single or multiple analysis datasets, so long as each analysis dataset is associated with a different state.

Custom reports can be designed and run against a single analysis dataset only.

Launching the ATIM Report Wizard

On the ATIM Welcome page, select the Create Reports button to launch the ATIM Report Wizard.

The ATIM Report Wizard Opens

The ATIM Report Wizard will guide you step-by-step through the process of selecting analysis datasets and running standard, saved, or custom reports.

Welcome to ATIM!

ATIM is used for analyzing Forest Service resource inventory and monitoring data. The reports created in ATIM provide unbiased, sample-based estimates of population parameters and associated sampling errors for various natural resource inventories.

With ATIM, you can run any of the standard reports for a given population of interest and inventory year (an analysis dataset). You can also create custom reports based on your selected criteria. Administrative users have the additional ability to create new analysis datasets for use in reporting.

To get started, select one of the tasks below.

Run Standard or Saved Reports, or Create Custom Reports

The report wizard will guide you step-by-step through the process of running standard reports or creating custom reports on existing analysis datasets. Click the Create Reports button to begin.
More on Customizing a Report

In addition to running standard reports that have been preloaded in ATIM as well saved analysis reports, you can also create a custom analysis report to generate estimates and associated sampling errors, variances, and confidence levels and run it against a single analysis.

You can either customize an existing report, such as a saved analysis report or a standard report, or create a custom report from scratch.

Custom report designs can be saved to your local system and can be uploaded back into ATIM at a later time if you would like to make adjustments to the design.

Custom Report tabs

Use the FILE, SETUP, ESTIMATE SELECTION, REPORT FORMAT, DATASET FILTERS, RUN OPTIONS, and CURRENT DESIGN tabs to customize existing report designs and/or designs you create from scratch.

- **FILE** tab – access this tab to save your report design to local and/or run your report design.
- **SETUP** tab – select an estimate attribute for your report.
- **REPORT FORMAT** tab – format your report table by specifying the respective variables you would like to group your pages, rows, and columns by. This determines the subtotals included in your report.
- **DATASET FILTERS** tab – (optional) specify how the data contained in the analysis are subset in the report.
- **RUN OPTIONS** tab – (optional) select how you want to display the sampling error in your report, choose to hide specific rows in your report, and/or add custom notes to your report.
- **CURRENT DESIGN** – at any time, review the selections and inputs made while creating a custom report.
Creating a New Analysis Dataset (Administrative Users only)

Administrative users have the ability to create new analyses in ATIM. When an administrative user creates a new analysis in ATIM, one or more resource inventory datasets (available from the DATIM data mart as DATIM datasets) are selected for a population of interest. These datasets provide the foundation of ATIM analyses.

1. **Creating a New Analysis Dataset**
   - On the ATIM Welcome page, select the **New Analysis** button to begin bundling DATIM datasets into a new analysis.

2. **The Create New Analysis Page Opens**
   - From the Create New Analysis page, select the DATIM datasets you want to bundle into a new analysis, name and describe the new analysis, and lastly, save it to the DATIM data mart.
Getting started with DTIM

The Design Tool for Inventory and Monitoring (DTIM) uses a project creation wizard to guide users through the steps necessary for designing an inventory and monitoring plan.

Using DTIM, you will also be able to assemble and evaluate existing data to determine if the data are adequate to meet your information needs.

If existing data are inadequate, DTIM will guide you through the process of designing an inventory plan to either intensify an existing inventory or start a new one. You will be walked through the steps of selecting precision constraints and estimating sample sizes with an intensified or new inventory.

Accessing DTIM
Select DTIM in the navigation menu to open the DTIM Welcome page. Alternatively, from the DATIM Welcome page, you can select the Design button.
The DTIM Project Creation Wizard

The DTIM project creation wizard guides you through the first three monitoring planning steps: selecting objectives, selecting questions, and selecting metrics. After those have been selected, DTIM guides you through selecting which metric, page, row, column combinations you would like to specify precision requirements for. DTIM offers base modules with predetermined sets of selectable objectives, questions, and metrics designed to meet specific needs or directives.

Step 1: Welcome JoeForester!

Welcome to the Design Tool for Inventory and Monitoring (DTIM) project creation wizard. Through the next several screens, you will be taken step-by-step through the process of selecting the objectives, questions and metrics for your project. Once you have completed this task, your project will be imported into the full DTIM system for further analysis.

As you work through the screens, note that at any time you can go back and change your responses. And if you make your way completely through the wizard and are unhappy with your selections, know that you can cancel this wizard at any time and start the process anew. So, if this is your first time using this wizard, explore the screens with the knowledge that you can change any of your selections.

On the following screens, you will see this icon 📘. This icon indicates there is more information about this item available. Hover your mouse over the icon to see that text.

To begin, press the "Start Wizard" button below.

Start Wizard >>
Getting started with SIT

The Spatial Intersection Tool (SIT) was developed to provide a geospatial interface for users to access natural resource inventory datasets and intersect plot-based data with geospatial layers via ESRI ArcMap. Currently only FS users can utilize the SIT tool.

### Accessing SIT

Select SIT in the navigation menu to open the Spatial Intersection Tool Addin page. Alternatively, from the DATIM Welcome page, you can select the Spatial Intersection button.
Spatial Intersection Tool Addin page

There are two ways you can work with the Spatial Intersection Tool (SIT):

1. If you have access to Citrix, then ArcMap can be accessed from the Citrix portal;
2. You can also use SIT from your desktop provided you have ArcGIS installed on your local machine.

Using SIT in Citrix

Steps 1 through 10 on the Spatial Intersection Tool Addin page detail how to access the SIT add-in in Citrix.

Using SIT from your desktop

Directions on how to save the addin to your desktop home directory can be found at the bottom of the Spatial Intersection Tool Addin page.

To use SIT in Citrix:

1. Launch ArcMap in Citrix from a NRM blade.
2. Go to Customize > Add-In Manager
3. In the Add-In Manager dialog, click the Options tab
4. Click the button labeled Add Folder...
5. Browse to the folder T:\FS\Reference\GeoTool\agency\Application\ArcGIS1031\Add-Ins and select SIT. Click OK.
6. Click the button labeled Customize...
7. In the Customize dialog, select the Commands tab.
8. In the Categories section, find and select DATIM.
9. Drag the tool name SIT to any available toolbar.
10. Click the Close button.

To save the addin to your Desktop Home Directory, navigate to this directory and save the file to:

C:\Users\<USERNAME>\My Documents\ArcGIS\AddIns\DesktopXX.XX

where **XX.XX** is the version of ArcGIS on your machine. Note: You need to have ArcGIS installed, and then add the last folder.

Click here to download the SIT Addin File (11.3 MB)
Getting started with SIT in Citrix

1. **Accessing ArcGIS in Citrix**
   After logging into Citrix using your Forest Service Active Directory user name and password, open the Natural Resource Manager Directory by navigating to Main, then National Applications, next click the Natural Resource Manager, and lastly click the ArcGIS 10-3-1 folder.

2. **Customizing the ArcMap Toolbar**
   From the ArcMap standard toolbar, select Customize and then Add-In Manager.

3. **Adding the SIT Add-in**
   From the Add-In Manager dialog, click the Options tab and then click the Add Folder... button and browse to the folder: T:\FS\Reference\GeoTool\agency\Application\ArcGIS1022\Add-Ins\SIT
   Click OK when finished.
Getting started with SIT and ArcMap from your desktop

1. Downloading the SIT Add-in
   Click the Click here to download the SIT Addin File (11.3 MB) link located at the bottom of the Spatial Intersection Tool Addin page.

   To save the addin to your Desktop Home Directory, navigate to this directory and save the file to:
   
   C:\Users\<USER_NAME>\My Documents\ArcGIS\Addins\DesktopXX.XX

   where XX.XX is the version of ArcGIS on your machine. Note: You need to have ArcGIS installed, and then add the last folder.

2. Saving the SIT Add-in
   A file download dialog pops up, prompting you to open or save the download file. Click the Save button. The file will be saved to your Downloads folder on your local system.

3. Using SIT and ArcMap on your desktop
   Next, click the Open folder button in the download dialog. This will open the Downloads folder where the SIT addin file is located.

   To use SIT and ArcMap on your desktop, cut and paste the addin file in your downloads to the following location:

   C:\Users\<USER_NAME>\My Documents\ArcGIS\Addins\DesktopXX.XX

   Note: XX.XX is the version of ArcGIS on your machine.
Adding the SIT add-in to the ArcMap toolbar

1. **Customize Mode**
   To begin, click *Customize* in the ArcMap standard toolbar. Select the *Customize Mode* option.

2. **Customize Dialog**
   When the *Customize* dialog opens, click on the *Commands* tab (1). From the *Categories* list, select *DATIM* (2). Drag the *SIT* tool from the *Commands* list (3) onto an existing toolbar (4). When finished, click the *Close* button.
Creating a SIT Point Layer

1. Creating a SIT Intersection using ArcMap
   
   1. Begin by selecting the SIT tool in ArcMap.

   2. The DATIM Login window will pop up. Select the PROD server to connect to and provide either your Forest Service Active Directory user name and password or your Level 1 eAuthentication credentials.

   3. SIT will open to the New Intersection page. Click the Select Task tab to make it active and then click the Create Point Layer (Fuzzed Coordinates) button.

2. Opening the Create Point Layer tab
   
   Choose a dataset from the Select Data Set list. Next choose a feature dataset to match the layer’s projection from the Select Feature Dataset to match projection list.

   After you select the dataset and feature dataset, click the Create Point Layer (Fuzzed Coordinates) button.

When you click the Create Point Layer (Fuzzed Coordinates) button, SIT creates the Point Layer shape file using the fuzzed coordinates in the national database. Fuzzed coordinates are used to maintain the security of the actual plot locations.
Creating a SIT Intersection

1. Select the SIT tool in ArcMap.

2. The DATIM Login window will pop up. Select the PROD server to connect to and provide either your Forest Service Active Directory user name and password or your Level 1 eAuthentication credentials.

3. The SIT application will open. From the Select Task tab, click the Setup Intersection button.

Opening the Intersection tab
Click the Intersection tab to enter a name and description for the intersection you would like to create. Use the subsequent tabs in SIT to complete the specs required for your intersection. When finished, click the Run Intersect button.

SIT tabs you can use to create an intersection:
- Geographic Extent (not available in DATIM 7.0) – used to select a region or forest for your geographic area.
- Data Sets – used to select datasets and filter CNs, and to generate POP tables.
- Feature Datasets – used to select the polygon layer to intersect.
- Attributes – used to select the polygon attribute to which to transfer plot data.
Getting started with DCS (Administrative Users only)

The DATIM Compilation System (DCS) was developed to augment and enhance existing DATIM datasets with the additional metrics necessary to conduct analyses and generate reports.

Advanced knowledge of the inventory data, compilation methods, and DATIM dataset construction is required. The data are “compiled” according to region-specific requirements using Forest Vegetation Simulator (FVS). A working knowledge of FVS is also highly recommended.

Users must have administrative privileges to run this program.

Accessing DCS
Select DCS in the navigation menu to open the DCS Welcome page. Alternatively, from the DATIM Welcome page, you can select the Compilation button.
The DCS ETL Project Wizard

A compilation module in DCS refers to a predetermined set of user inputs and processes used to run a compilation to enhance selected DATIM datasets using FVS and, in some cases, to conduct post-processing.

When compiling an ETL (extract, transform and load) project, you can do so by utilizing FVS with or without the use of an uploaded keyword component file (KCP), which is an “addfile” used to perform complicated interactions with the FVS models. With this task, you will be able to load and compile basic data and create new DATIM datasets.

1. Launching the DCS ETL Project Wizard
   On the DCS Welcome page, select the Compile an ETL Project button.

2. The DCS ETL Project Wizard Opens
   The DCS ETL Project wizard guides you through the four main steps to compiling an ETL project: ETL project selection, loading the ETL project, configuring FVS, and displaying FVS results and errors.
Updating FVS Attributes

Administrators responsible for running the compiler can also use DCS to update FVS attributes and the corresponding metadata.

Updated attributes are either updated in the SAMP_UNIT_FOREST or SAMP_UNIT_TREE tables in the data mart.