GeoPlatform Service User Guide

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IRWIN GeoPlatform Service

IRWIN has created a service named "Current_Wildland_Fires" and is providing access to this service through the ArcGIS Online GeoPlatform. This geospatial service provides a public view into the current wildland fire data that is being shared through the Integrated Reporting of Wildland-Fire Information (IRWIN).

This data provides the location of existing fires, size, conditions and several other attributes that help classify fires. The Current Wildland Fires service allows users to create a web map, share it with their organization, or pull it into ArcMap for more in-depth analysis. The below steps outline best practices for interacting with the Current Wildland Fires service.

Accessing the GeoPlatform Service

Below are the steps to access the GeoPlatform service:

1. If you don't already have an account on the GeoPlatform ArcGIS Online Organization, go to https://idp.geoplatform.gov/registeruser.html and create an account.
2. After creating an account, you will need to gain access to the "Current Wildland Fires" Group
    o Go to https://geoplatform.maps.arcgis.com/home/index.html
    o Sign in using the geoplatform.gov Account that you just created.
    o Search for the group "Current Wildland Fires" and request to "JOIN THIS GROUP".
3. Once you have access to this group, you will be able to access the Current Wildland Fire service as a feature or map service

Understanding the GeoPlatform Service

Figure 1 shows the overview tab for the Current Wildland Fires service. This tab provides links for useful information about this service including additional metadata and the URL for creating web maps with this service. The Current Wildland Fire service is expressed as an item in the group. For help on working with the items in a group can be found at: http://doc.arcgis.com/en/arcgis-online/share-maps/item-details.htm

On the bottom right corner of the page, there is a link to the service that can be used to create web maps (as indicated by the **GREEN** circle around the service URL in Figure 1).

On the left, under "Layers," there is a link that will allow you to access the ArcGIS Server rest endpoint (as indicated by the **GREEN** circle around the Current_Wildland_Fires link in Figure 1). Please note, you will not be able to navigate around the ArcGIS Server Rest endpoint, only view the individual page to which you've been given access.

Accessing the GeoPlatform Service in ArcMap

To access the GeoPlatform service in ArcMap, reference the following online documentation:
http://desktop.arcgis.com/en/arcmap/latest/map/working-with-arcmap/adding-data-from-arcgis-online.htm

- After opening ArcMap navigate to File > Sign in
- Below the Username and Password option, select **Enterprise**
- Enter "geoplatform" into the open box
- Select "Using Your GeoPlatform.Gov Account"
- Log-in with your GeoPlatform username and password
- Navigate to File > ArcGIS Online
- From this dialog box, navigate to My Groups > Current Wildland Fires > Current_Wildland_Fires service

Adding the GeoPlatform Service to a web map

To create a web map with the Current Wildland Fires service within the GeoPlatform Organization, reference the following online documentation: http://doc.arcgis.com/en/arcgis-online/create-maps/add-layers.htm

- Navigate to the page shown in Figure 1
- Copy the service URL from the bottom right corner of the page
- Open a new web map and select "Add Layer from Web" as seen in Figure 2

Figure 2. Current Wildland Fires map service
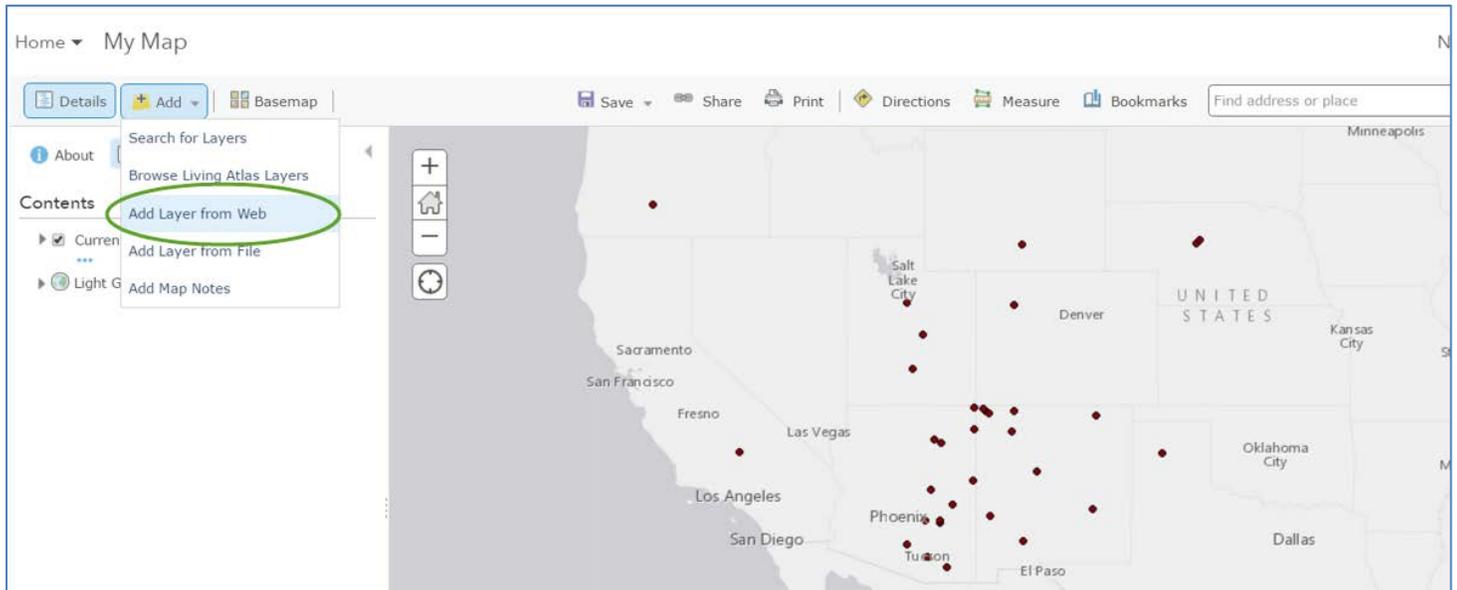
Accessing the Service Endpoint from Custom Application

You can also reference http://resources.arcgis.com/en/help/arcgis-rest-api/index.html for assistance in working with the ArcGIS Rest Services. Additional guidance on leveraging ArcGIS Rest Services for custom developed applications can be found at: https://developers.arcgis.com/documentation/

Definition Query

The service returns all valid incidents excluding (False Alarms, Pre-Position, Support, or Out of Area) that have been modified within the last 8 days, and not considered "out". The following query is used to extract the incidents from IRWIN.

```
IsValid = 'true'

and IncidentTypeCategory not in ('FA',' PP', 'SU', 'OR')

and DATEDIFF(minute, ModifiedOnDateTime, GETDATE()) <= 11520

and FireOutDateTime is NULL
```

Data Element Definitions

When using the service, it is important to understand the definitions of the data that are being populated by the external systems contributing to the incident records. The table below shows each the name and a short description for data element available in the service.

IRWIN Data Element	Short Description
AdditionalFuelModel	The fuel model which best represents an additional carrier of the fire.
ContainmentDateTime	The date and time a wildfire was declared contained.
ControlDateTime	The date and time a wildfire was declared under control.
CreatedBySystem	ArcGIS Server Username of system that created the Irwin Incident record.
CreatedOnDateTime	Date/time that the Irwin Incident record was created.
DailyAcres	A measure of acres reported for a fire. More specifically, the number of acres within the current perimeter of a specific, individual incident, including unburned and unburnable islands. The minimum size must be 0.1.
DispatchCenterID	A unique identifier for a dispatch center responsible for supporting the incident.
EstimatedContainmentDate	The estimated date a wildfire will be contained.
EstimatedCostToDate	Estimated total incident costs to date for the entire incident based on currently available information. Costs include estimates for all costs for the response including management and support activities.
FinalAcres	The measure of acres within the final perimeter of a fire. More specifically, the number of acres within the final fire perimeter of a specific, individual incident, including unburned and unburnable islands.
FinalFireReportApprovedBy	The name of the person that approved the final fire report for the incident.
FinalStrategyAttainedDateTime	The date/time the final fire strategy was accomplished on the incident.
FireBehaviorDescription	A description of the observed fire behavior for the current ICS-209 reporting period.
FireBehaviorGeneral	A general category describing the manner in which the fire is currently reacting to the influences of fuel, weather, and topography.
FireBehaviorGeneral1	A more specific category further describing the general fire behavior (manner in which the fire is currently reacting to the influences of fuel, weather, and topography).
FireBehaviorGeneral2	A more specific category further describing the general fire behavior (manner in which the fire is currently reacting to the influences of fuel, weather, and topography).
FireBehaviorGeneral3	A more specific category further describing the general fire behavior (manner in which the fire is currently reacting to the influences of fuel, weather, and topography).
FireCause	Broad classification of the reason the fire occurred identified as human, natural or undetermined.
FireCauseGeneral	Agency or circumstance which started a fire or set the stage for its occurrence; source of a fire's ignition. For statistical purposes, fire causes are further broken into specific causes.
FireCauseSpecific	A further categorization of each General Fire Cause to indicate more specifically the agency or circumstance which started a fire or set the stage for its occurrence; source of a fire's ignition.

IRWIN Data Element	Short Description
FireDiscoveryDateTime	The date and time a fire was reported as discovered or confirmed to exist. May also be the start date for reporting purposes.
FireGrowthCessationDateTime	The date/time that the fire perimeter stopped growing in size.
FireIgnitionDateTime	The actual date/time that the fire began ignition. This date may be different from the fire discovery date.
FireMgmtComplexity	The highest management level utilized to manage a wildland fire event.
FireOutDateTime	The date and time when a fire is declared out.
FiscallyResponsibleUnit	NWCG Unit who has fiscal responsibility for the incident.
GACC	A code that identifies one of the wildland fire geographic area coordination centers. A geographic area coordination center is a facility that is used for the coordination of agency or jurisdictional resources in support of one or more incidents within a geographic coordination area.
ICS209ReportForTimePeriodFrom	The date and time of the beginning of the time period for the current ICS209 submission.
ICS209ReportForTimePeriodTo	The date and time of the end of the time period for the current ICS209 submission.
IncidentCommanderName	The first (optional) and last name of the incident commander currently assigned to the incident.
IncidentManagementOrganization	The incident management organization for the incident, which may be a Type 1, 2, or 3 Incident Management Team (IMT), a Unified Command, a Unified Command with an IMT, NIMO, etc. This field is null if no team is assigned.
IncidentName	The name assigned to an incident.
IncidentShortDescription	General descriptive location of the incident such as the number of miles from an identifiable town.
IncidentTypeCategory	The Event Category is a sub-group of the Event Kind code and description. The Event Category further breaks down the Event Kind into more specific event categories.
IncidentTypeKind	A general, high-level code and description of the types of incidents and planned events to which the interagency wildland fire community responds.
InitialFireStrategyMetIndicator	Indicates if the initial fire strategy for the incident was successful.
InitialResponseDateTime	The date/time of the initial response to the incident. More specifically when the IC arrives and performs initial size up.
IrwinID	Unique identifier assigned to each incident record in IRWIN.
IsMultiJurisdictional	Indicates if the incident covers multiple jurisdictions.
LocalIncidentIdentifier	A number or code that uniquely identifies an incident for a particular local fire management organization within a particular calendar year.
ModifiedBySystem	ArcGIS Server Username of system that last modified the Irwin Incident record.
ModifiedOnDateTime	Date/time that the Irwin Incident record was last modified.
PercentContained	Indicates the percent of incident area that is no longer active. *Reference definition in fire line handbook when developing standard.*
POOCity	The closest city to the incident point of origin.
POOCounty	The County Name identifying the county or equivalent entity at point of origin designated at the time of collection.

IRWIN Data Element	Short Description
POOFips	The code which uniquely identifies counties and county equivalents. The first two digits are the FIPS State code and the last three are the county code within the state.
POOIncidentJurisdictionalAgency	The agency having land and resource management responsibility for an incident as provided by federal, state or local law.
POOJurisdictionalUnit	NWCG Unit Identifier to identify the unit with jurisdiction for the land where the point of origin of a fire falls.
POOJurisdictionalUnitParentUnit	The unit ID for the parent entity, such as a BLM State Office or USFS Regional Office, that resides over the Jurisdictional Unit.
POOLandownerCategory	More specific classification of land ownership within land owner kinds identifying the owner at the point of origin at the time of the incident. Owner in the context of this data element refers to the agency or entity having the land management responsibility at the point of origin.
POOLandownerKind	Broad classification of land ownership at the point of origin.
POOLatitude	The latitude location of the point of origin specified in decimal degrees. Point of origin is the location where a competent ignition source came into contact with the material first ignited and sustained combustion occurred.
POOLegalDescPrincipalMeridian	The principal meridian of the legal description (section, township, range) of the incident at point of origin.
POOLegalDescQtr	The quarter section of the legal description (section, township, range) of the incident at point of origin.
POOLegalDescQtrQtr	The quarter/quarter section of the legal description (section, township, range) of the incident at point of origin.
POOLegalDescRange	The range of the legal description (section, township, range) of the incident at point of origin.
POOLegalDescSection	The section of the legal description (section, township, range) of the incident at point of origin.
POOLegalDescTownship	The township of the legal description (section, township, range) of the incident at point of origin.
POOLongitude	The longitude location of the point of origin specified in decimal degrees. Point of origin is the location where a competent ignition source came into contact with the material first ignited and sustained combustion occurred.
POOState	The State Alpha Code identifying the state or equivalent entity at point of origin.
PredominantFuelModel	Describes the type of fuels found within the majority of the incident area.
PrimaryFuelModel	The fuel model which best represents the primary carrier of the fire for the reporting period.
SecondaryFuelModel	The fuel model which best represents the secondary carrier of the fire for the reporting period.
Shape	Geographic representation of POO in NAD83 datum.
SummaryFuelModel	A brief summary of the type of terrain or any significant fuel considerations for the reporting period.
TotalIncidentPersonnel	The total number of personnel assigned. Includes overhead, crewmembers, helicopter crewmember, engine crewmembers, camp crew people, etc.
UnifiedCommand	Indicates whether the incident is being managed under Unified Command. Unified Command is an application of the Incident Command System used when

IRWIN Data Element	Short Description
	there is more than one agency with incident jurisdiction or when incidents cross political jurisdictions. Under Unified Command, agencies work together through their designated Incident Commanders at a single incident command post to establish common objectives and issue a single Incident Action Plan.
UniqueFireIdentifier	Unique identifier assigned to each wildland fire. yyyy = calendar year, SSUUUU = POO protecting unit identifier (5 or 6 characters), xxxxxx = local incident identifier (6 to 10 characters)
WeatherConcerns	A brief summary of how the current weather is affecting the incident and how the anticipated weather will affect the incident.
WFDSSDecisionStatus	Indicates the state of the WFDSS decision and/or if a WFDSS decision has been approved for the incident. This information is helpful in resolving conflicts between incident records.

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