

# ArcGIS Earth for Enterprises

DARRON PUSTAM | ARCGIS EARTH

CHRIS ANDREWS | 3D

# ArcGIS Earth is

ArcGIS Earth is a lightweight globe desktop application that helps you explore any part of the world and investigate and create 3D and 2D map data including KML

# Why are customers interested



Require file-based workflows with KML and other vector and raster GIS data sources and services



Want lightweight user interface and familiar experience



Need to provide consistent communication among stakeholders across the enterprise



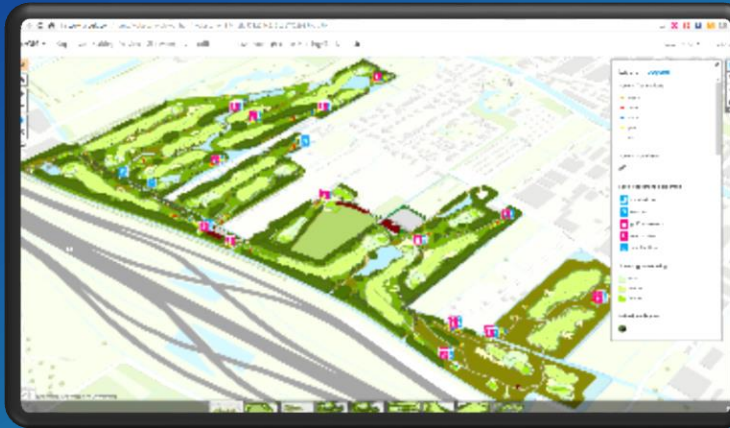
# Customer examples include



## Large Enterprises

Exploring data securely on premises

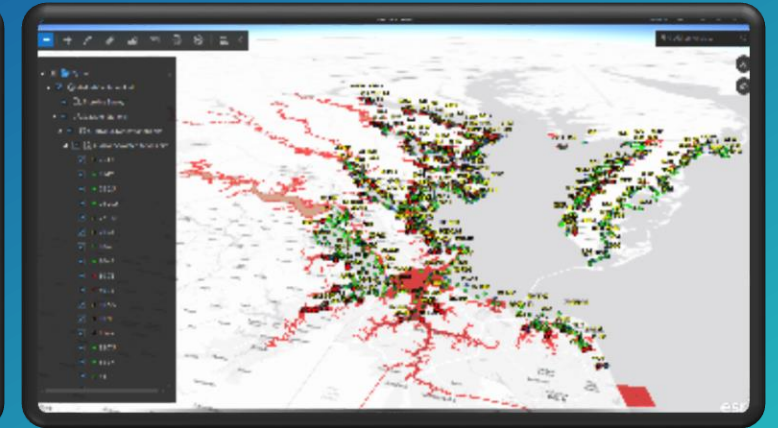
Law enforcement, federal agencies & large companies need to explore information across large areas using 3D GIS behind a firewall



## Small Enterprises

Sharing 3D using ArcGIS Online

City planners, urban designers, and small AEC firms want to create and share plans and status with constituents in 3D



## Hybrid scenario

3D with large data packages in connected and disconnected workflows

Emergency managers, military, and utilities agencies need to use 3D within the organization for planning and to share with collaborators in the field to inform response and action

# Designed for large customers, works for everyone

Lightweight (~60Mb)

Configurable during installation

Secure authentication

Multiple deployment patterns

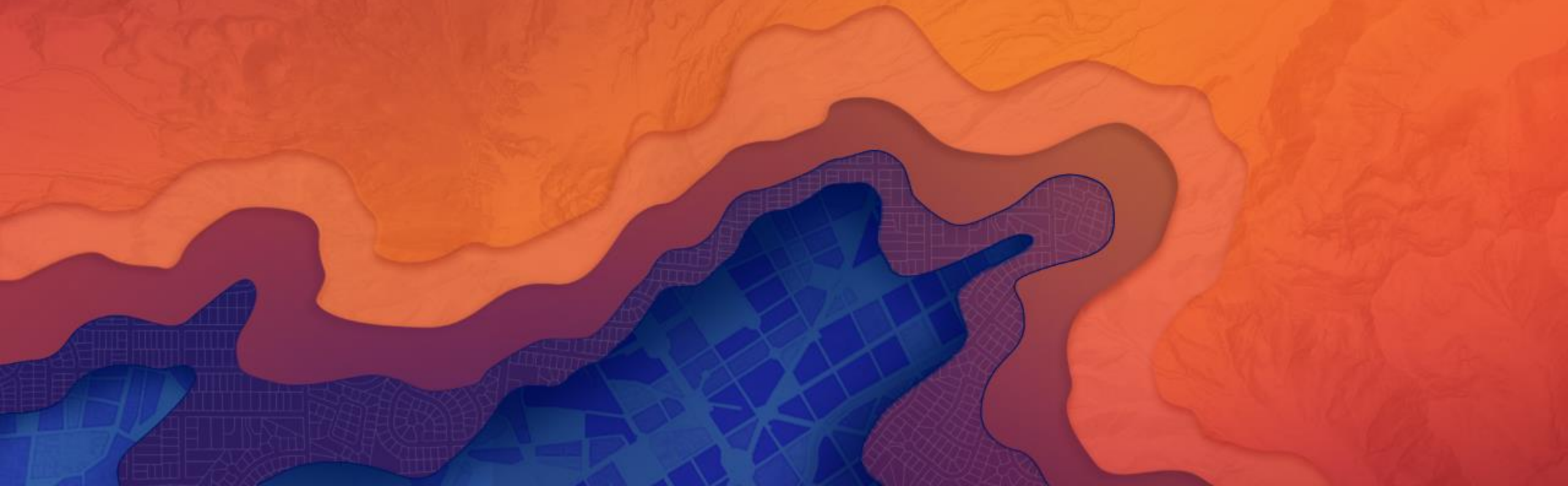
Low training requirement





# ArcGIS Earth

DEPLOYMENT PATTERNS



# ArcGIS Earth Deployment Patterns | On Premises

On Premises  
“Disconnected”

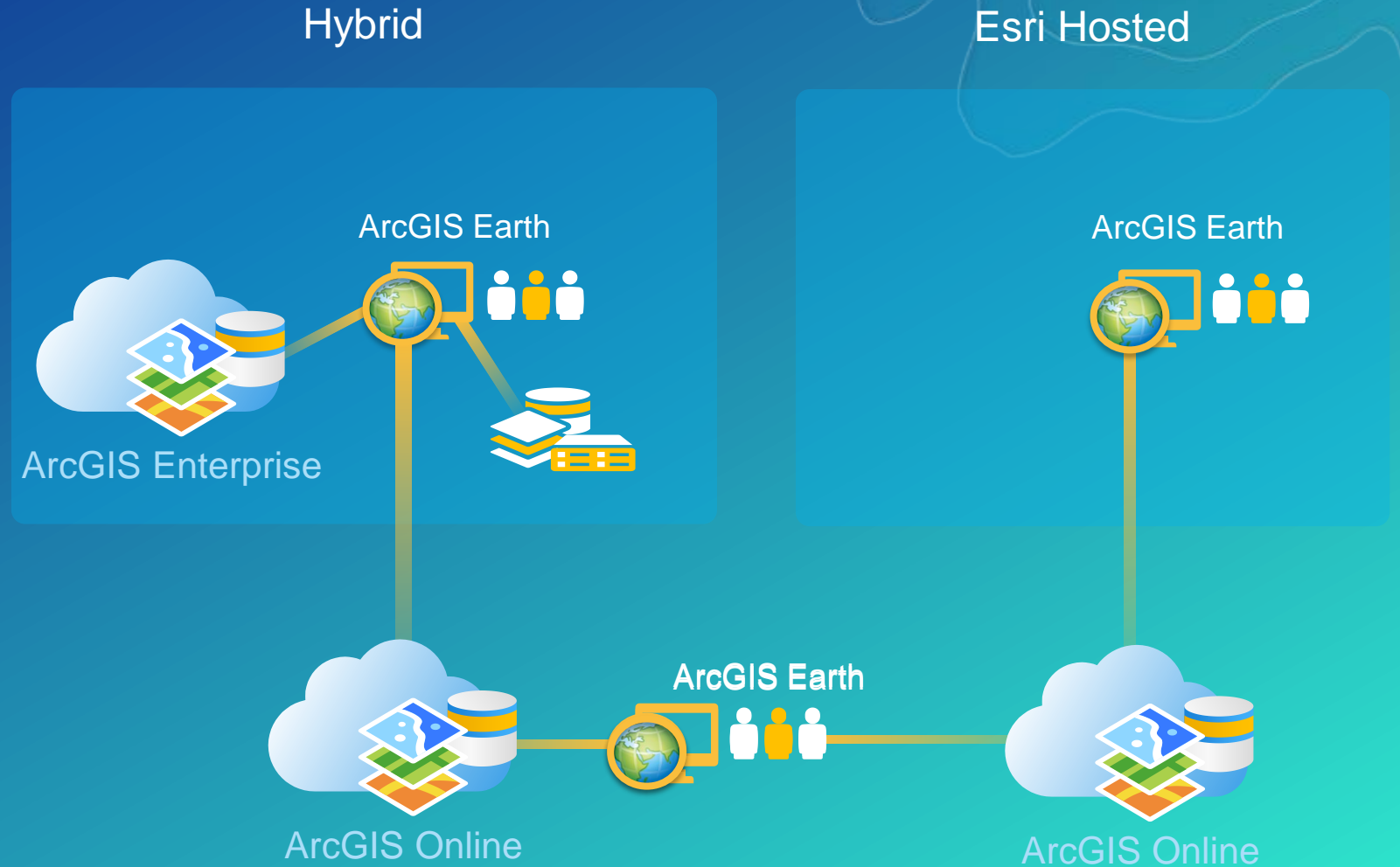


# ArcGIS Earth Deployment Patterns | Esri Hosted





# ArcGIS Earth Deployment Patterns | Hybrid

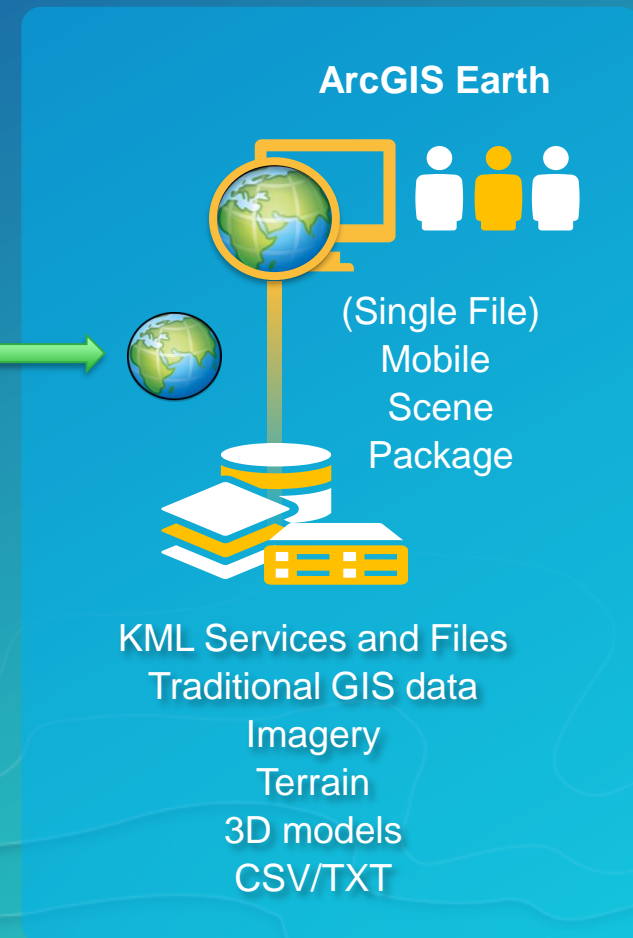


# ArcGIS Earth Deployment Patterns | Offline

Current Workflow  
Offline - “Disconnected”



Future Workflow  
Offline - “Disconnected”



# Combine 2D & 3D in the same architecture



Enterprise Client  Plug-in



Google Earth  
Enterprise Server

*Accessible,  
familiar  
experience*

KML Services and Files  
Traditional GIS data  
Imagery  
Terrain  
3D models  
CSV/TXT

*Transparent,  
Open,  
Standards-based*

Web

Runtime  
apps

ArcGIS  
Pro

ArcGIS  
Earth



Portal



Content and  
Services



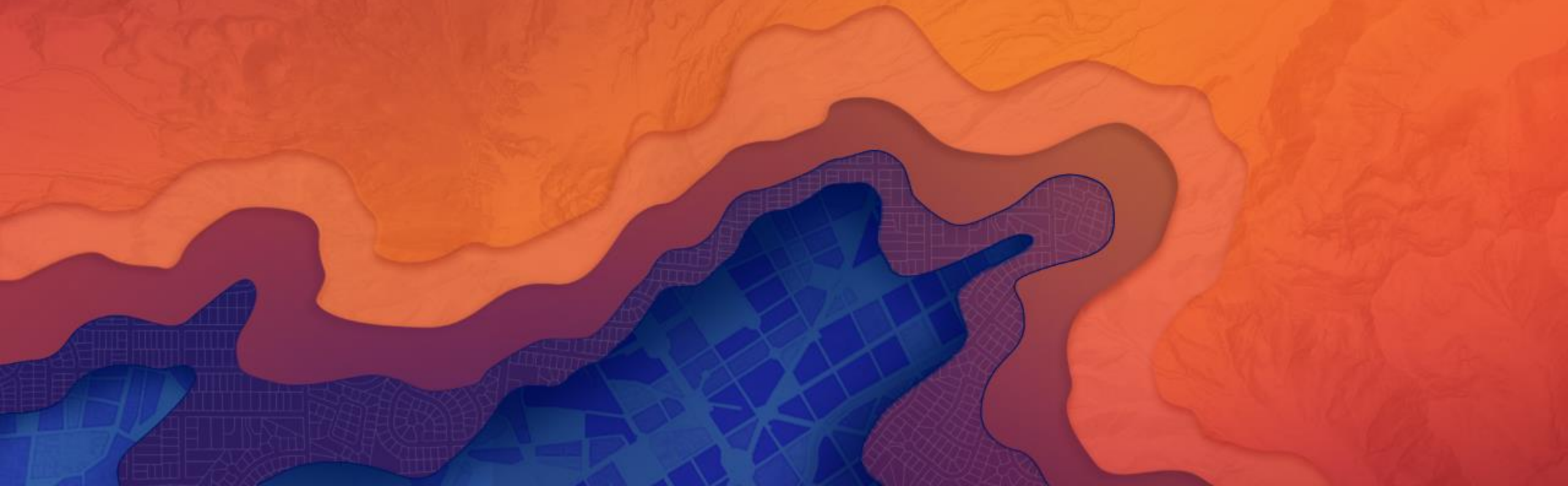
Server

ArcGIS Enterprise



# ArcGIS Earth

DEEP DIVE INTO ADMIN FEATURES



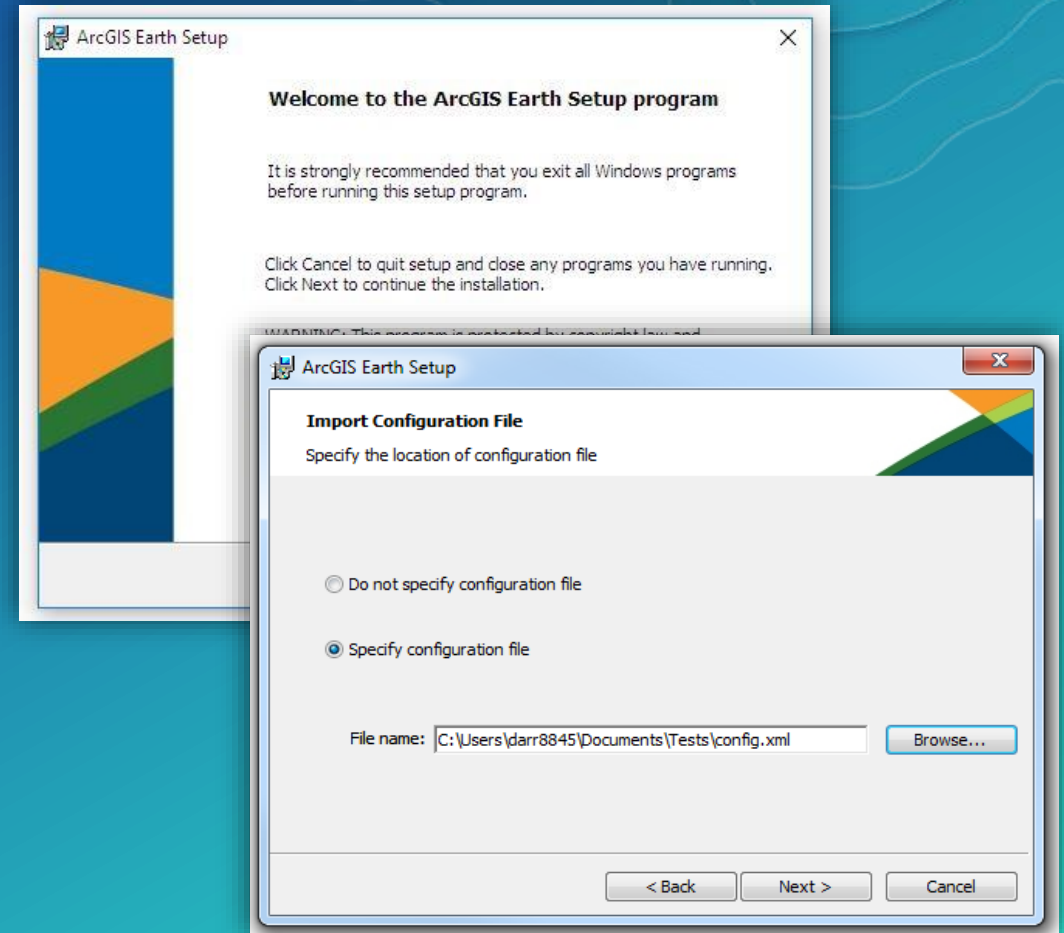
# Configure ArcGIS Earth at install

Preset configuration Parameters  
in *config.xml*

Add Start Up layers including WMS

Configure help location, feedback link,  
acknowledgements, message banner

Silent configuration possible using command line parameters at install



# Preconfigure ArcGIS Earth for your users

Additional configuration parameters include specifying:

Portals

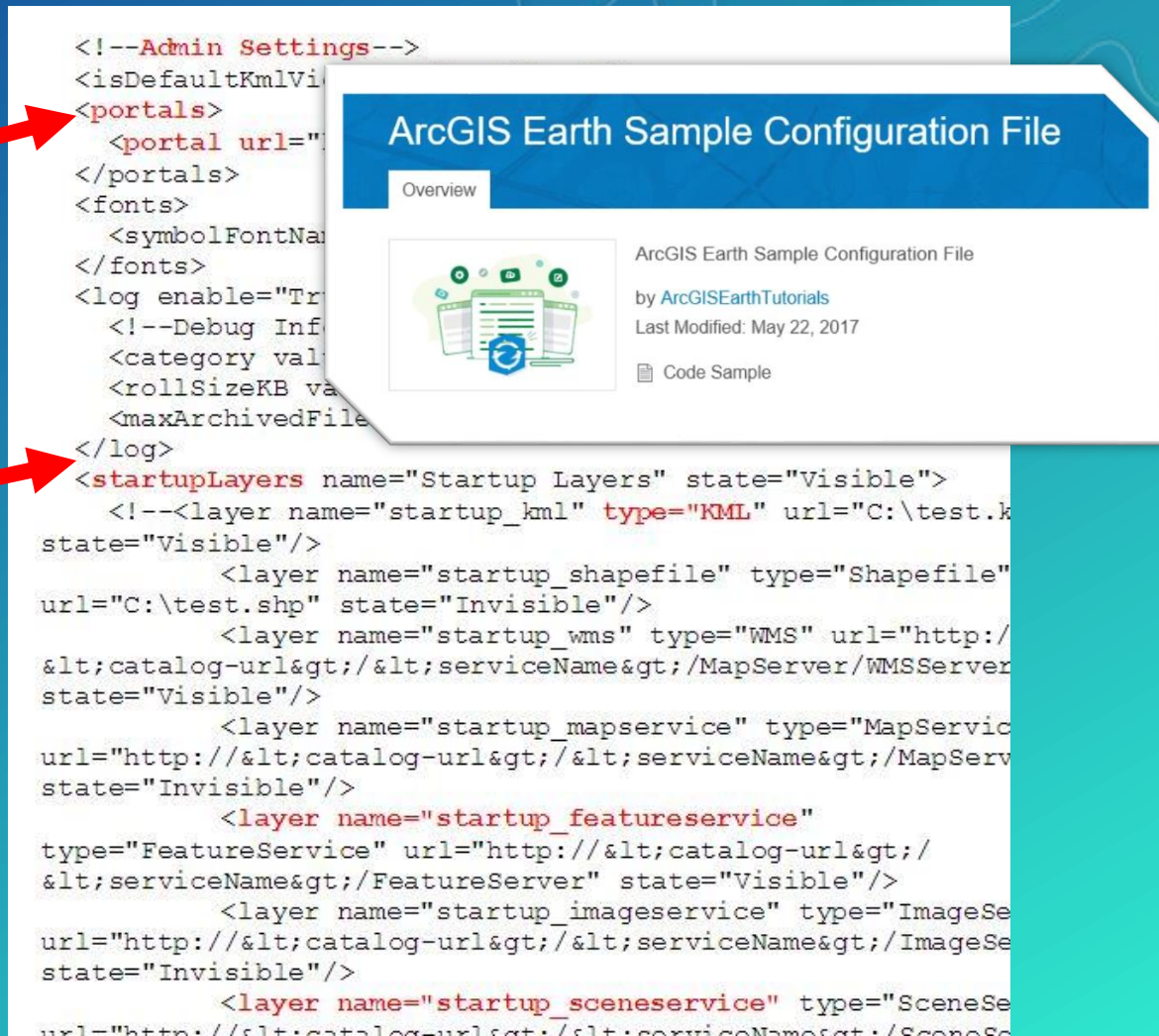
Navigation

Units

Data layers (basemaps & terrain)

Error logging

Alternate icon path for legacy KML



The image displays a sample configuration file for ArcGIS Earth. It features a preview window titled "ArcGIS Earth Sample Configuration File" with an "Overview" tab. The preview shows a document icon and metadata: "ArcGIS Earth Sample Configuration File", "by ArcGISEarthTutorials", "Last Modified: May 22, 2017", and a "Code Sample" link. The main area shows the XML code for the configuration file. Two red arrows point from the text on the left to specific parts of the XML: one points to the `<portals>` section, and the other points to the `<startupLayers>` section.

```
<!--Admin Settings-->
<isDefaultKmlVi
<portals>
  <portal url="
</portals>
<font>
  <symbolFontNa
</font>
<log enable="Tr
  <!--Debug Inf
  <category val
  <rollSizeKB va
  <maxArchivedFile
</log>
<startupLayers name="Startup Layers" state="Visible">
  <!--<layer name="startup_kml" type="KML" url="C:\test.k
state="Visible"/>
    <layer name="startup_shapefile" type="Shapefile"
url="C:\test.shp" state="Invisible"/>
    <layer name="startup_wms" type="WMS" url="http://
&lt;catalog-url&gt;/&lt;serviceName&gt;/MapServer/WMSServer
state="Visible"/>
    <layer name="startup_mapservice" type="MapService
url="http://&lt;catalog-url&gt;/&lt;serviceName&gt;/MapServ
state="Invisible"/>
    <layer name="startup_featureservice"
type="FeatureService" url="http://&lt;catalog-url&gt;/
&lt;serviceName&gt;/FeatureServer" state="Visible"/>
    <layer name="startup_imageservice" type="ImageSe
url="http://&lt;catalog-url&gt;/&lt;serviceName&gt;/ImageSe
state="Invisible"/>
    <layer name="startup_sceneservice" type="SceneSe
url="http://&lt;catalog-url&gt;/&lt;serviceName&gt;/SceneSe
```



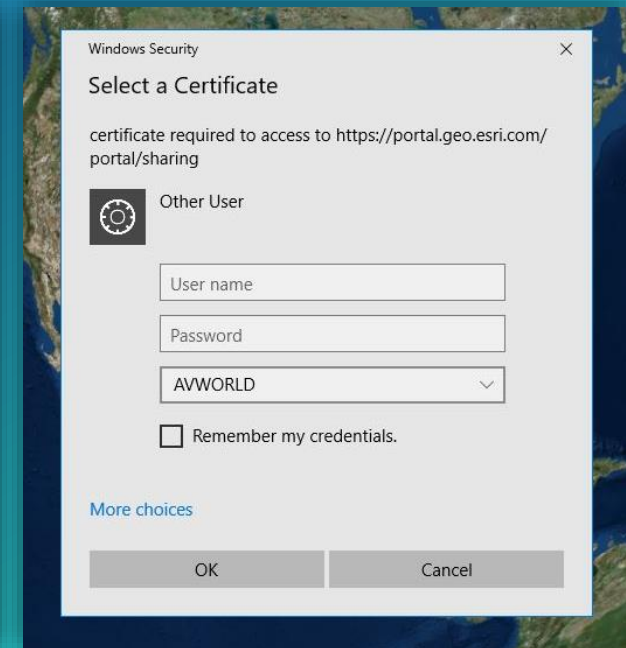
# ArcGIS Earth supports secure authentication

Connect securely to ArcGIS Online or ArcGIS Enterprise

Users with Earth configured to point at a PKI-enabled Portal  
will be automatically signed in

ArcGIS Earth supports portal starting at [Portal for ArcGIS 10.2.1](#) and supports SAML authentication at version 10.4 and later.

ArcGIS Earth version	Portal for ArcGIS				
	Built-in security	IWA security	PKI security	SAML authentication	Kerberos security
1.0	✓	✓	✓		✓
1.1	✓	✓	✓		✓
1.2, 1.2.1, 1.3, 1.4, 1.5	✓	✓	✓	✓	✓





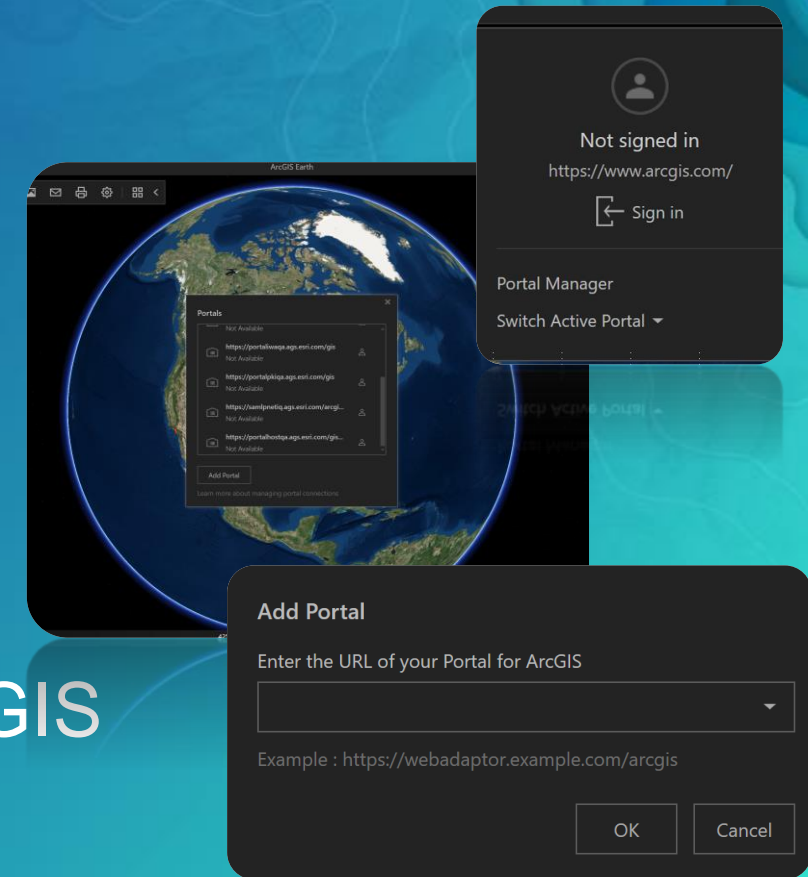
# Access secure content

Authenticated users can:

- Access authorized shared content in ArcGIS Enterprise or ArcGIS Online
- Access locator in ArcGIS Enterprise

Users cannot:

- Publish content directly to the internet\* or ArcGIS Online



*\*All Earth users can create drawing items and save them as local KMZ files and take screenshots*

# Configure geocoding services

On premises users can access a configured locator for batch address geocoding

- Currently only one locator can be accessed
- *Future:* allow user to choose locators
- *Future:* geocode against ArcGIS Online

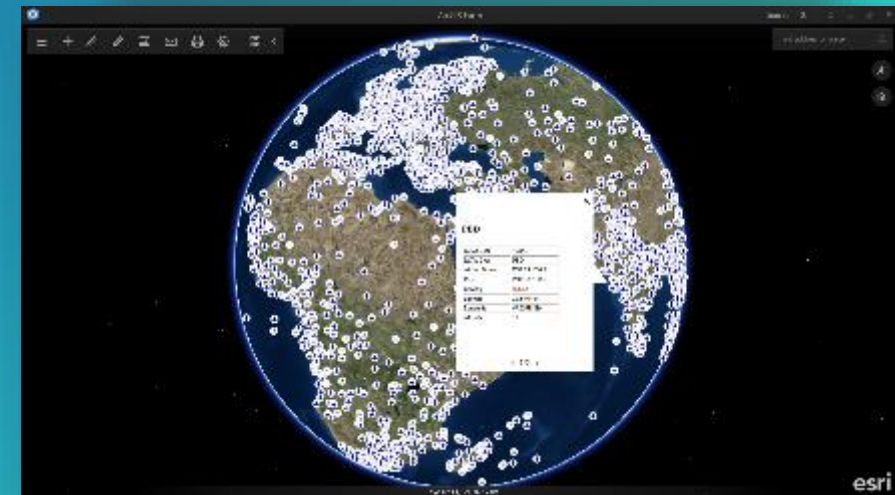
GlobalAirportDatabase.csv

DataView  
Advanced

Mode  
XY

XY	ICAO Code	IATA Code	Airport Name	C
X,Y	string	string	string	st
145.391..., -6.0816...	AYGA	GKA	GOROKA	GO
0, 0	AYLA	LAE		LA
145.788..., -5.2069...	AYMD	MAG	MADANG	M
144.296..., -5.8261...	AYMH	HGU	MOUNT HAGEN	M
146.726..., -6.5697...	AYNZ	LAE	NADZAB	N

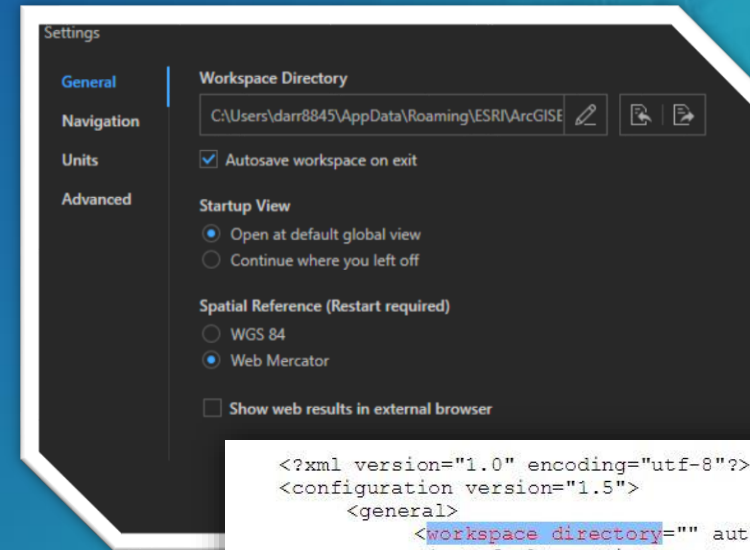
OK Cancel



# Configure Workspace

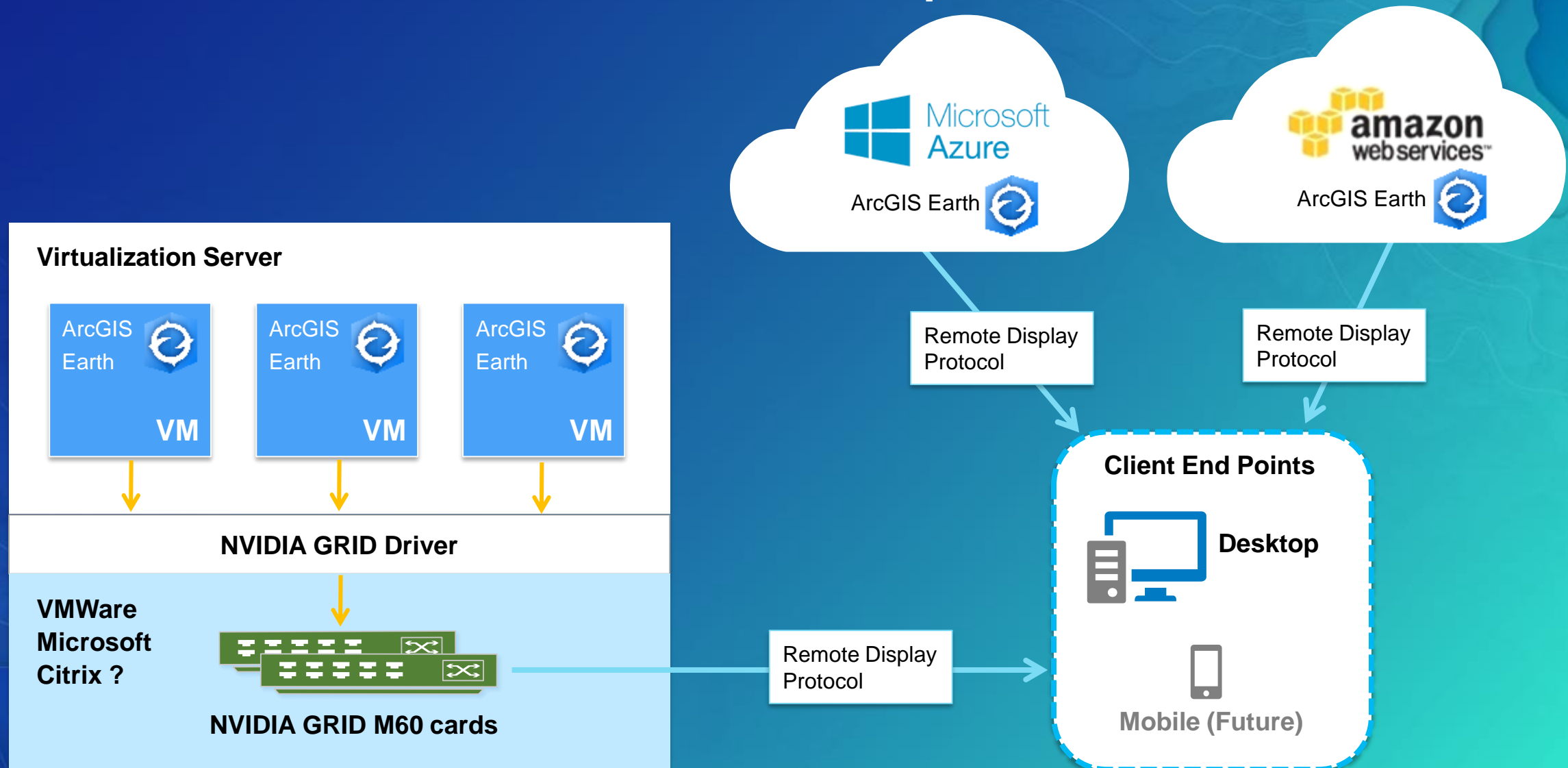
ArcGIS Earth workspace location can be set by user or administrator

- Can be directed to a local folder or a network folder
- Workspace can be backed up using standard recovery software



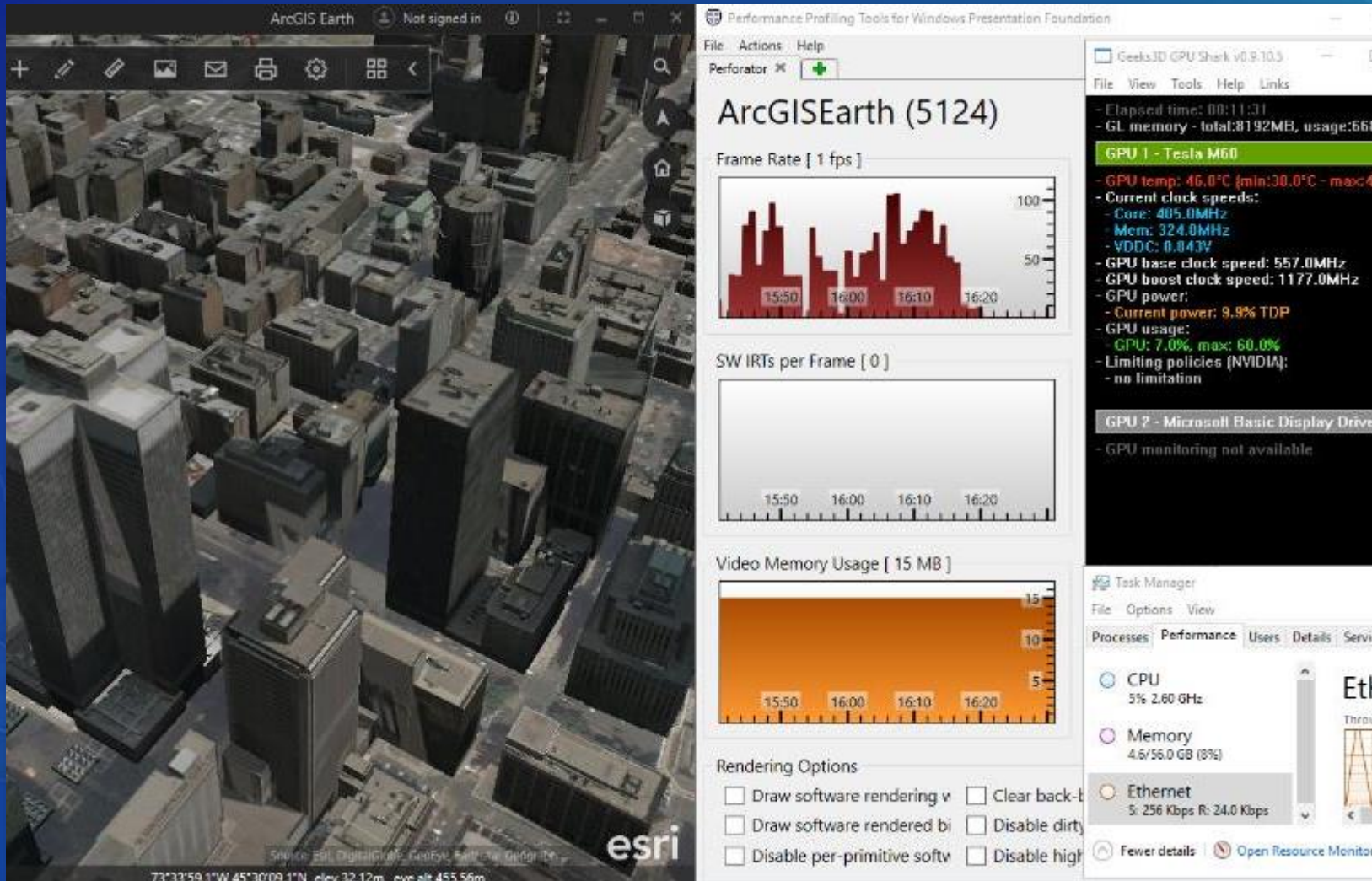
```
<?xml version="1.0" encoding="utf-8"?>
<configuration version="1.5">
  <general>
    <workspace_directory="" autoSave="True"/>
    <!--Default or History-->
    <startupView value="Default" />
    <!--WebMercator or WGS84-->
    <spatialReference value="WebMercator" />
    <isShowInExternalBrowser value="False" />
  </general>
  <navigation>
    <!--speed:0 ~ 100-->
    <flyto speed="50" autoZoomToNewLayer="True"/>
    <!--speed:0 ~ 100; zoomDirection:Forward or
    Backward-->
    <mouseWheel speed="50" zoomDirection="Forward"/>
    <continuousPanning value="True" />
  </navigation>
  <effects3d>
    <!--On or Off-->
    <atmosphere value="On"/>
  </effects3d>
</configuration>
```

# ArcGIS Earth on virtualized platforms





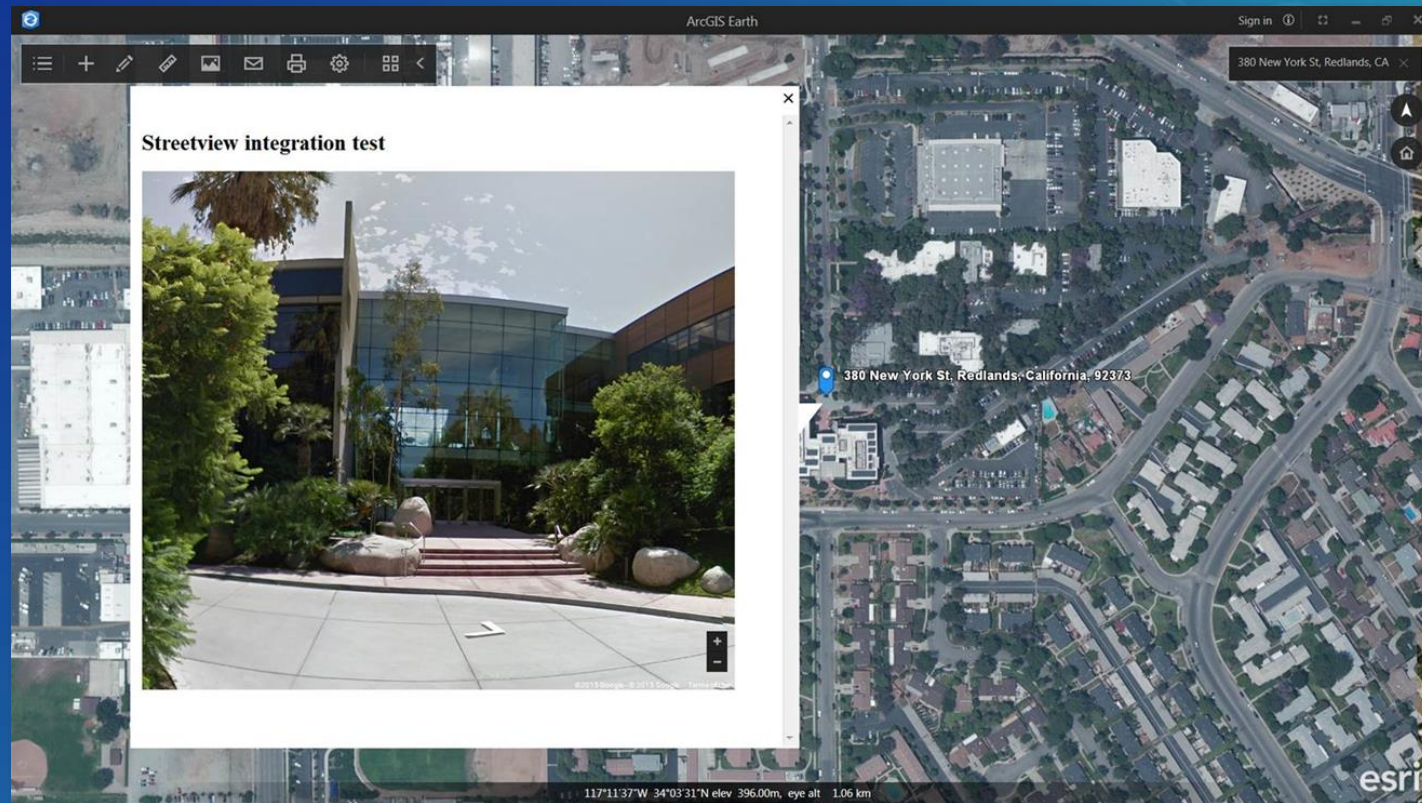
# ArcGIS Earth on hardware-accelerated VMs



Microsoft Azure  
NV-series instances



# Call external KML services with a click of the mouse



See <http://doc.arcgis.com/en/arcgis-earth/> for more...

*Streetview imagery shown is a demo example of Google Streetview integration and does not imply endorsement of ArcGIS Earth or Esri by Google*

# Licensing

ArcGIS Earth is free for download and use

Users of ArcGIS Earth can view publicly-shared data in ArcGIS Online and Portal for ArcGIS without a Named User account

Protected data in Online and Portal requires Named User access

Some premium content in the Living Atlas requires a Named user account

Download directly from <http://j.mp/ArcGISEarthDownload>

Version 1.5 is English-only

# More information and support

Product pages and download – <http://j.mp/ArcGISEarthDownload>

Help documentation and system requirements – [http://j.mp/Earth1\\_0Doc](http://j.mp/Earth1_0Doc)

GeoNet forum - [http://j.mp/Earth1\\_0Forum](http://j.mp/Earth1_0Forum)

Twitter - @ArcGISEarth

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# ArcGIS Earth Roadmap (planned)

**Essential User Experience**  
2016

Lightweight & easy to use  
KML, Services & Open Standards (WMS, WMTS)  
Portal

**Secure & Deployable**  
2017

Configurable Install  
Authentication  
Drawing, Icons and Popup Implementation

**Major  
Runtime  
Technology  
Dependency**



**Data, Capabilities & Performance**  
**New runtime version**  
Mid Term

Vector Tiles, Point Clouds, 3D Points, GeoJSON  
KML Editing  
Interactive Tools  
Disconnected Globe (Mobile Scene Package)

**Extended Workflows**  
Longer Term

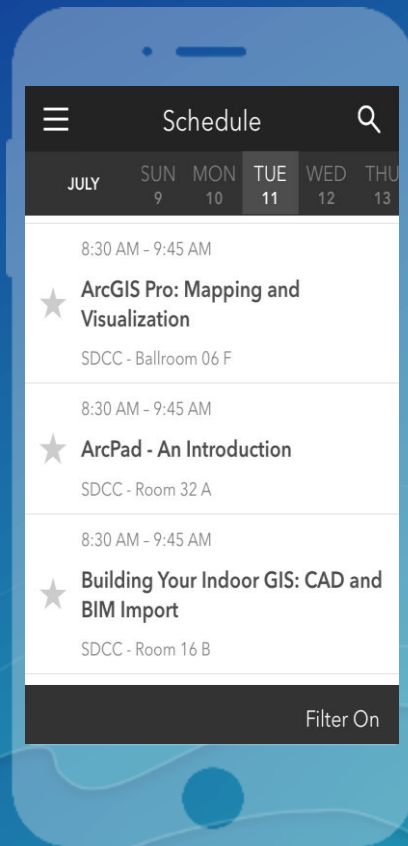
Plug-in Framework and API  
Centralized configuration in Portal  
Earth Mobile

# Please Take Our Survey on the Esri Events App!

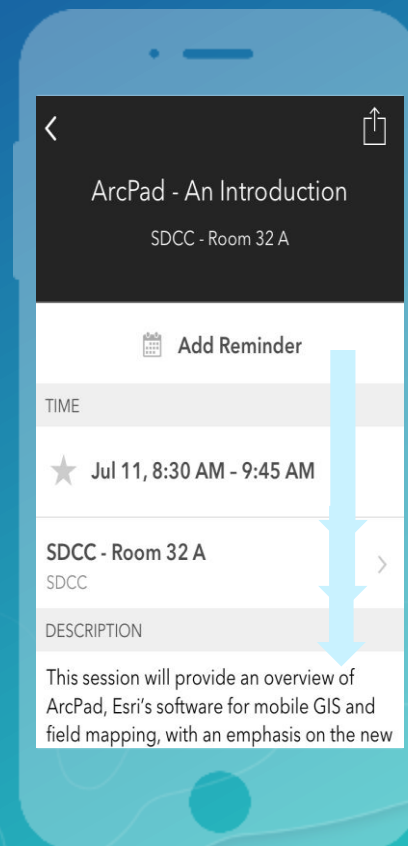
**Download the Esri Events app and find your event**



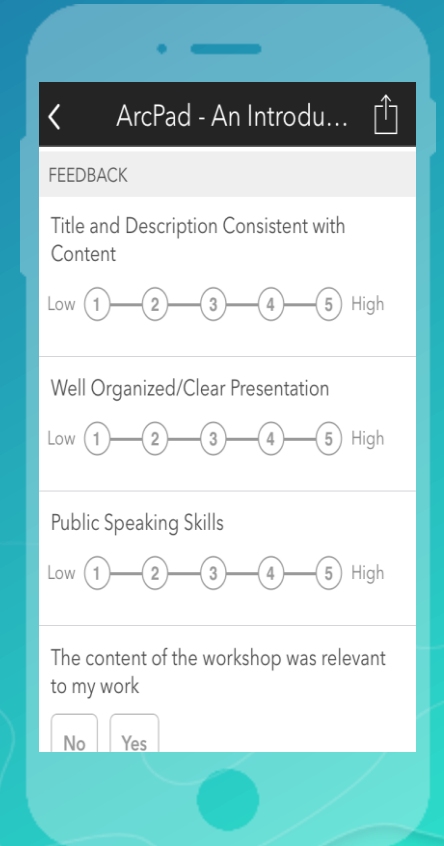
**Select the session you attended**



**Scroll down to find the survey**



**Complete Answers and Select "Submit"**





Q & A



esri

THE  
SCIENCE  
OF  
WHERE

Thank you

[dpustam@esri.com](mailto:dpustam@esri.com)

[candrews@esri.com](mailto:candrews@esri.com)