Overview

Let’s begin with a brief overview of today’s presentation so that I can properly set expectations. The intended audience is primarily for existing Desktop users that have experience working with ArcMap. The goal of this presentation is to help you get familiar with ArcGIS Pro and its key capabilities.
Desktop – Professional GIS Applications

ArcGIS for Desktop is part of an integrated system.

The desktop is about professional GIS applications. I’d expect that most of you dialed in today are ArcMap users. 10.3 was released at the end of last year and ArcMap improved in quality and performance. New cartographic and analytic tools were added such as the Space time pattern mining tools. It also enhances image processing and supports full PKI for security.

> In January, we released a new application called ArcGIS Pro that is also a part of ArcGIS for Desktop and it runs side by side with ArcMap. Not just side by side 10.3 ArcMap, but ANY version of ArcMap (9.3, 9.3.1, 10, 10.1, 10.2). So regardless of the version of Desktop you are running, you can install and use ArcGIS Pro as long as the System Requirements are met. The most notable is a 64-bit version of Windows.

ArcGIS Pro does not do everything Desktop does. ArcMap is still relevant, and will continue to be for a long time.

What Pro does do, it does better and I plan on showing you many of those things today.
ArcGIS for Desktop Roadmap

To put the evolution of ArcGIS Pro in perspective, let’s take a look back over the last couple of years at the ArcGIS for Desktop Roadmap.

In 2013, we released 10.2 and this was significant for Desktop users because an ArcGIS Identity or ArcGIS Online “Named User” account was included with a Desktop license. This meant that Desktop users were able to establish and ArcGIS Online Organization and begin doing what you’ve probably all hear Jack refer to as “Web GIS”.

> Last year, 10.2.1 was released to enable Collector for ArcGIS to take data from an ArcGIS Server offline for field data collection workflows and to provide quality updates. > 10.2.2 was another quality release in April.

> At the end of last year, ArcGIS 10.3 was released and contained a number of new features in the areas of Image Processing and some new Space Time Pattern Mining analysis tools.

January of 2015 we released version 1.0 of ArcGIS Pro which is a new 64-bit application that is now included as part of Desktop.
Who is ArcGIS Pro for?
The whole GIS user community ArcGIS Pro - Empowering the GIS Community to do amazing things with Geography and GIS.
Top ideas

Some of the motivation behind building ArcGIS Pro came from ideas from the user community. These are some of the ideas with the highest votes on the site and have influenced the development team’s priorities.

> Export to Excel was the highest vote getter and was actually implemented in the 10.2 release of ArcGIS. > A 64-bit application and high demand to bring back multiple layouts have found their way into ArcGIS Pro.

Keep those ideas coming and you may see yours in the software!
What you get with ArcGIS Desktop

With the release of 10.3, what you get with ArcGIS Desktop is all the same applications you have been using, such as, ArcMap, ArcCatalog, ArcGlobe, and ArcScene as well as a new application ArcGIS Pro. The ArcGIS Identity extends your Desktop GIS to include ALL of the Online Apps...

ArcGIS Pro is a first class client to ArcGIS Online and Portal for ArcGIS and is licensed with the same levels; Basic, Standard, and Advanced that you are familiar with in ArcGIS for Desktop.
ArcGIS for Desktop includes new apps

Desktop users now have immediate access to new apps such as Collector for ArcGIS, Operations Dashboard, Explorer, the entire Esri Maps for suite, and finally, ArcGIS Pro. What is different about ArcGIS Pro than ArcMap is that it is designed as a Platform app that you access with the same ArcGIS Identity you do with Collector, Operations Dashboards and Esri Maps for Office.

ArcGIS Pro is installed and updated with an entirely new approach more similar to the way applications are updated on your tablets and smart phones. So this leads to a very frequently asked question...
Application Fusion

If I confused you on the previous slides, if you didn’t get it, we are taking the best of Map, Catalog, Globe and Scene and fusing them in one application. Pro also contains the City Engine runtime to fully leverage the incredibly realistic procedural rules that can be created to simulate 3D features. We expect the Professional GIS workstation in 2015 not to be the same old single monitor, but a multi-monitor or video wall configuration to use this application and its tear away views, that can be touch enabled too.
ArcGIS Pro

ArcGIS Pro has reinvented desktop GIS with a truly 64-bit desktop application that takes advantage of modern hardware for maximum performance and smooth map and 3D scene displays. It has a vibrant, contextual interface that provides users with the right tools at the right time. Design and edit in 2D and 3D in one place, work with multiple displays and layout designs, and publish finished web maps directly to ArcGIS Online or Portal for ArcGIS.

ArcGIS Pro is a new part of ArcGIS for Desktop and is available to all users with a current maintenance subscription. Side by side with any version of ArcMap, use the new ArcGIS Pro to build maps with up-to-date data, combined with deep analysis, and share them where they’ll have the most impact. It’s efficient, has an intuitive display, supports multiple layouts, and is a step toward the future of desktop GIS. Best of all, ArcGIS Pro connects tightly with the rest of the ArcGIS platform making it the premier application for web GIS. As a matter of fact, to access the amazing powers of ArcGIS Pro, you need ArcGIS Online of Portal for ArcGIS because ArcGIS Pro licenses are assigned and managed through a portal.

ArcGIS Pro can work side-by-side with ArcMap so there is no need for users to pick one over the other. ArcGIS Pro can enable Desktop users to connect with people within the organization or throughout the world by sharing their work with co-workers, stakeholders, clients and the public. ArcGIS Pro is a central and integrated part of the ArcGIS platform that can provide the scalability they need to be individually successful and drive success in their organization.
Is ArcGIS Pro a replacement for ArcMap?

No, ArcGIS Pro is an addition to Desktop and is considered a part of Desktop, not a replacement. They can run side by side and we expect this will be the case for quite some time into the future.

Map (.mxd), Globe (.3dd) and Scene (.sxd) documents can be imported to Pro. ArcGIS Pro and ArcMap can interoperate at the data and service level. Python scripts and script tools run in ArcGIS Pro with minor updates.

We expect Desktop (ArcMap/ArcCatalog/ArcGlobe/ArcScene will still be relevant for quite some time into the future.
Let me show you what I mean...
ArcGIS for Desktop Product Life Cycle Support Status

If you look at the Product Life Cycle Support Status for ArcGIS for Desktop, you can see that our plans are to support ArcMap for 6 years after the release date.

To put this into perspective, if you have a son or daughter that is a senior in high school and if all goes as planned, they will graduate from college before we retire version 10.2!

Rest assured your investments in ArcMap and Desktop are going to be protected for some time into the future.
Data Management

In the Data Management area, it is important that we be transparent and let you know that we recommend you continue to use Desktop (ArcMap) to maintain authoritative data in specific industries, because the initial release of ArcGIS Pro will only support simple feature editing (points, lines, and polygons).

In Land Records, users will continue to use ArcMap to maintain Topology and/or Parcel Fabrics. Support for these will come in a later release of ArcGIS Pro.

In Utilities, users will also continue to use ArcMap until support for Geometric Networks and Network Tracing is added.

Until support is added for Linear Referencing, Transportation (DOTs) will continue to use ArcMap/Highways and Roads to maintain their data.

Finally, Feature class Annotation and Dimensions are read only in ArcGIS Pro 1.0. Spatial Adjustment workflows will continue to be done in ArcMap. We do expect to support these items in future releases, but those timeframes are still to be determined.
Customization of ArcGIS for Desktop 10.3

Customization of ArcGIS Pro will be limited in this first release. An all new .NET SDK for ArcGIS Pro is now available with the release of Beta 1.1 last month.

Investments you have made in customizations to ArcMap to support workflows will be protected and will continue to be fully supported as discussed with the Product Life Cycle earlier.

If you want to write customized application interfaces and extensions using .NET, you can either still do that with ArcMap or align your roadmap and timeframe with a forthcoming release of Pro.
**Download**
- Review the ArcGIS Pro system requirements to verify operating system and other prerequisites
- Download ArcGIS Pro and any optional setups from My Esri
  1. **ArcGIS Pro (required):** Download to get the main ArcGIS Pro application.
  2. **Offline Help (optional):** Download to access offline help for ArcGIS Pro if you know you will be working in a disconnected environment.
  3. **Python (optional):** Running Python scripts from within ArcGIS Pro is available by default, but download to run stand-alone scripts outside of the ArcGIS Pro application.

**Signin and authorize**
- After ArcGIS Pro is installed, you need to sign in and authorize your software license.
- Licenses for ArcGIS Pro are managed through ArcGIS Online or Portal for ArcGIS.
- Before you can use ArcGIS Pro, your organization’s administrator needs to assign a software license level and, optionally, any additional extensions.
- **Know before you Pro** will give you background on this.

**Get ArcGIS Pro software updates**
- When Esri releases an update for the application, by default, a notification appears when you start ArcGIS Pro.

**Customize User Interface**
- Create new tabs on the ribbon, add groups inside those tabs, and choose which buttons appear on the tabs.

**Set Display Language**
- You can run a translated version of ArcGIS Pro by adding a language pack to the ArcGIS Pro application.
- By default, the Microsoft Windows display language sets the language for ArcGIS Pro. For example, if you have installed a German language pack for ArcGIS Pro and your Windows display language is also German, ArcGIS Pro runs in German automatically.
- Language packs for ArcGIS Pro can be obtained from distributors or the My Esri website.
How will ArcGIS Pro Licenses be managed?

As an administrator of an organization that has been provisioned for ArcGIS Pro, you use ArcGIS Online or Portal for ArcGIS to specify which members can run ArcGIS Pro and the software licenses available to them. You can manage licenses for individual members or make bulk assignment updates.

The organization administrator will assign a member one license level and can also enable access to optional extensions that provide specialized tools. For a member to use an extension, the member needs both a level and a license for the specific extension product.

You can reassign licenses as often as you need, and the resulting changes take effect promptly in ArcGIS Pro.

A Pro user can download and install Pro, but will need to Sign-in with their ArcGIS Identity at startup. In rare circumstances where no internet connectivity will be available, a user can take their license offline.
ArcGIS Pro Extensions

We will support these extensions for Pro in the first release. Data Interoperability will be added at 1.1.
<table>
<thead>
<tr>
<th>Key Terms</th>
<th>Description or usage</th>
<th>Similar concept in other ArcGIS for Desktop applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArcGIS Pro</td>
<td>A collection of related geographic datasets, maps, layouts, tools, settings, and resources, saved in an .aprx file.</td>
<td></td>
</tr>
<tr>
<td>Map</td>
<td>The project item used to display and work with geographic data in two dimensions. A map opens in a map view.</td>
<td>ArcMap document (.mxd)</td>
</tr>
<tr>
<td>Scene</td>
<td>The project item used to display and work with geographic data in three dimensions. A scene can open as either a global or local perspective. A scene can be converted to a map, and vice versa.</td>
<td>Global scene: ArcGlobe document (.3dd) Local scene: ArcScene document (.sxd)</td>
</tr>
<tr>
<td>Active view</td>
<td>The view that currently has keyboard focus. The active view controls the contents of the ribbon—for example, if a map is the active view, you see commands for working with maps. There is only one active view within the application at any given time.</td>
<td>Active data frame</td>
</tr>
<tr>
<td>View</td>
<td>The window representing the primary work area of the application. You can have multiple views open at the same time and display them side by side.</td>
<td>Similar to a map view or layout view, but there can be other types in ArcGIS Pro.</td>
</tr>
<tr>
<td>Ribbon</td>
<td>The rectangular area across the top of the application composed of tabs that contain software functionality.</td>
<td>User interface menus and toolbars</td>
</tr>
<tr>
<td>Contextual tab</td>
<td>A context-sensitive tab that appears and disappears on the ribbon under certain circumstances.</td>
<td></td>
</tr>
<tr>
<td>Pane</td>
<td>A dockable window that contains a related set of commands.</td>
<td>Dockable window</td>
</tr>
</tbody>
</table>

**Key Terms**

Many of the concepts from other ArcGIS for Desktop applications are found in ArcGIS Pro, but ArcGIS Pro introduces some new terminology and user interface elements. See the [ArcGIS Pro terminology and user interface reference](http://pro.arcgis.com/en/pro-app/get-started/arcgis-pro-terminology.htm) for more details.
**ArcGIS Pro projects**

The ArcGIS Pro application allows you to assemble all the resources required to complete a project in one place. A project contains maps, layouts, tasks, and connections to servers, databases, toolboxes, folders, styles, and so on. It can also incorporate content from your organization's portal or ArcGIS Online.

Projects can be created on your local file system, and shared online as a project package. Online projects can be downloaded to complete work locally on any computer.

**Work as a team**

Projects can be shared as a project package among the members of a team. A senior technical team member can create the project, share the project, and update the project as needed. The team members can download the latest project package so they are always working with the most current project contents. This way, team members don't have to know how and where to access datasets or author maps, they can focus on accomplishing their specific task.
Project Management

Every ArcGIS Pro project has a Home Folder, a Default File Geodatabase, and a Default Toolbox. It is very likely many of you will need to Insert additional resources to be used with your Project. ArcGIS Pro allows you to use a wide variety of items from databases, file-based datasets, and web services. It’s easy to add Database Connections and connections to your ArcGIS Server. Pro stores the connection files in the project folder so that they are always accessible to the project.
Migrate your work

ArcGIS Pro provides a path for you to migrate your existing GIS work to build projects

• First create a new project
• Go to your Insert tab and Connect to folders and existing databases
• Then add your maps and content -- Map(.mxd), Globe(.3dd) and Scene(.sxd) documents can be imported to Pro
• Your existing toolboxes, models, and scripts can be reused in ArcGIS Pro. However, As Rob mentioned if you use arcpy.mapping, you may need to make adjustments to work with project files (.aprx) and maps, instead of map documents (.mxd)

• The Migration overview highlights how you create projects, connect to data, import maps, use tools, run models or scripts, edit data, and share it.
• Use the ArcGIS Pro terminology and user interface reference to learn about new terms and functionality, and compare them to similar concepts in ArcGIS for Desktop.
• Migrate your content is a tutorial that takes your existing GIS work from ArcGIS for Desktop into projects.
• Python 3 migration details how the move to Python 3 affects your scripts. All arcpy.mapping scripts must be updated for use with ArcGIS Pro.
• Analyze tools for Pro examines your scripts and custom tools—giving you warnings for functionality that is not supported in ArcGIS Pro.
Let’s take a tour (30-45 minute demo) of ArcGIS Pro to get you acquainted with its key capabilities.

Your work in ArcGIS Pro is organized into projects, which contain all of the resources for you to do your work in one place. **Show me how**

You can visualize your data in both 2D and 3D. You can store as many maps as you need in the same project, and you can open multiple maps at once and view them side by side. **Show me how**

Geoprocessing provides a rich suite of tools for performing spatial analysis and managing GIS data in an automated way. **Show me how Watch a video**

You can visualize the layers you’re editing in both 2D and 3D so you can see features from all perspectives. Editing involves creating, updating, and maintaining geospatial information that is stored and organized in layers. **Show me how**

You can share everything from whole projects to maps, layers, tasks, and other components of your work. **Show me how**

You can customize the user interface to meet your needs, write Python scripts to automate your work, and in future releases, extend ArcGIS Pro through a .NET SDK. **Show me how to customize the user interface**
Show me how to automate my work
Summary

Desktop is still relevant, and will be for a long time. ArcMap continues and keeps getting better with the 10.3 release.

ArcGIS Pro is an exciting new App in the ArcGIS for Desktop family. It runs side-by-side ArcMap and Getting started is as easy as importing your map, scene and globe documents. Your GP models and scripts, and map layouts also are ready for use in Pro with little or no modification.

> Pro comes with the same license levels you are used to. And finally, > Familiar extensions will be available with Pro for the first release.
ArcGIS Pro 2015

There is a lot of exciting things going on with ArcGIS Pro in 2015. 1.1 Beta is currently available via the Early Adopter Community and includes the all new .Net SDK for Pro. We are anticipating the release of 1.1 before the User Conference and another major release with 1.2 toward the end of the year.
Questions
Thank you for attending this presentation. While I take some questions I’ll go to the next slide that has some links to ArcGIS Pro resources to get you started.
ArcGIS Pro Resources
Some of the resources that will help you continue to learn how to use ArcGIS Pro and migrate your existing GIS work.

Links:

Video Tour
ArcGIS Pro Help
Terminology Guide
Learn ArcGIS Pro