

# OrgPublisher Architecture Overview

OrgPublisher<sup>™</sup>

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# OrgPublisher Introduction

This document provides a high level overview of OrgPublisher and information related to installing the application. It includes deployment requirements and, in addition, it provides links to information you may need for a successful install.

OrgPublisher™ automatically builds organizational charts from information stored in your company HR system.

It charts hierarchical data (such as person-to-person, position-to-position and department-to-department relationships) from your existing HR system, and automatically creates an org chart based on the hierarchy extracted.

The infrastructure and systems requirements OrgPublisher are usually readily available within most organizations.

OrgPublisher connects to an ODBC compliant data source and allows for import of a variety of data sources.

OrgPublisher is available in:

- OrgPublisher
- OrgPublisher Premier (includes OrgSuccession™ Features)
- OrgPublisher Executive on Apple® iPad® (requiring separate license and download from Apple store)
- OrgPublisher for *SAP® solutions*
- OrgPublisher for *Oracle® HRMS*
- OrgPublisher for *PeopleSoft® HCM*

After installation, your OrgPublisher administrator creates the charts from the data available. A *New Chart Wizard* walks the administrator through all of the steps to access the data and format the chart.

Included with OrgPublisher 10 and later, Microsoft® Silverlight® is available for publishing charts across any browser that supports Silverlight, such as: Google Chrome™ 12, Mozilla™ Firefox®, Netscape® 8, Mac Safari® 5. It provides interactive features, such as animation. It also provides searching, drilling, and view options in a rich user experience.

In addition, with OrgPublisher 11 and later, the option to publish employee data to [OrgPublisher Executive](#) on Apple® iPad® enables C-level executives, line managers, and HR professionals to manage talent on the go, even when offline.

## **Data Sources**

OrgPublisher charts hierarchical data (such as person-to-person, position-to-position and department-to-department relationships) from your existing HR system, and automatically creates an org chart based on the hierarchy extracted.

OrgPublisher connects to an ODBC compliant data source and allows for import of data directly from the data source, as well as other sources of data such as XML, CSV, and LDAP.

In addition, connections to well known ERP and HR systems such as, PeopleSoft® and Oracle® are easily achieved. OrgPublisher for SAP® solutions comes with easily customizable SAP® output formats.

For a detailed list of data source options, see [Data Sources](#).

## **OrgPublisher Users**

There are multiple OrgPublisher user categories, allowing you to be specific about access privileges and the type of published output each user requires:

- Administrators
- Power End Users
- Standard End Users
- Planning Users

For more information on the activities assigned to each user type, see [OrgPublisher User Descriptions](#).

## **Publishing Options**

OrgPublisher provides a variety of publishing options that range from displaying a PDF on your intranet, to interactive charts that are updated on a specified schedule, and interactive charts in a real-time environment. You can also publish employee data to the iPad mobile digital device.

Once published to your corporate intranet, the data represented on the chart can be used for on-the-fly data analysis and reporting.

For more information on publishing options, see [Publishing Options](#).

## **System Requirements**

[System requirements](#) details can be found on the [Customer Care Portal](#).

EChart Thin Client utilizes the server rather than individual user workstations to process the org chart. The EChart Thin server hardware requirements can vary depending on a number of factors, such as number of records charted, number of custom fields, concurrent users, whether the servers are dedicated to only this function or not, and so on. Ultimately, load testing in the working environment will determine the final configuration.

The following table lists recommendations that can serve as a starting point for estimating hardware requirements for Thin Client.

EChart Thin Client Server Number of Records	Dual Load Balanced Server Processor	GHz	Memory	Dedicated vs Shared Memory
up to 1000	i3 (or compatible)	3	2GB	3GB
1001 to 5000	i3 (or compatible)	3	2GB	3GB
5001 to 15000	i3 (or compatible)	3	2GB	3GB
15001 to 25000	i5 (or compatible)	3+	4GB	4GB
25000 and up	i5 (or compatible)	3+	4GB	4GB

## ***Web Administration Server***

In addition to the regular administrator function, OrgPublisher provides extended capability with the Web Administration Server function that is installed on a Web server. This allows multiple administrators to access OrgPublisher, and it also provides access through any browser on the Internet.

For more information on publishing options, see [Web Administration Server](#).

For more information, please contact [Product Support](#).

# Architecture Overview

OrgPublisher architecture consists of four primary components, shown in Figure 1.

1. A **Data Source** provides the data to be acted upon to produce the org chart.
2. An **Org Chart Publishing Computer** on which OrgPublisher has been installed that enables the org chart administrator to select the appropriate data, apply the appropriate arrangement and formatting components, and publish the final chart for viewing by end users.
3. An **Intranet Web Server** or computer to host the published org chart files; may or may not be the same as the publishing computer. The OrgPublisher application utilizes a Windows® platform computer, which can be either a network computer or a Web server. For large/secure charts using EChart publishing, an ISAPI server with Microsoft® IIS is required.
4. A **Web Browser** that provides for interactive viewing of the published org chart information. The selected publishing format prescribes the viewer's experience and capabilities, as well as the required browser components. Publishing choices include Graphic, HTML, EChart Thin Client and PDF (publishing formats that require no additional browser components). PluginX and EChart Rich Client options provide interactive org charts that require the installation of the OrgPublisher PluginX component.

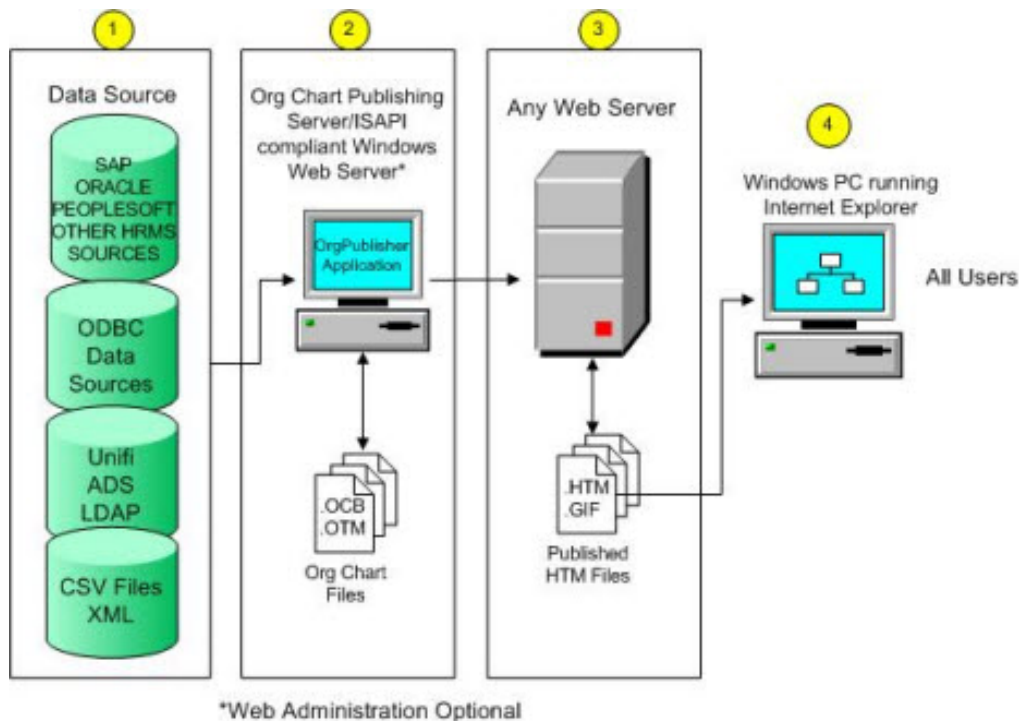


Figure 1.

## Data Sources

The data source can be any data source, or any combination of data sources, that contain reporting information. The data source connectivity is accomplished in one of several ways. OrgPublisher provides ODBC, XML, and CSV file connection. Additional connectors for Oracle® HR, Directory Servers, and PeopleSoft® are available from the Web site. OrgPublisher for *SAP® solutions*, OrgPublisher for *PeopleSoft®*, OrgPublisher for *Oracle EBS®* are also available.

Additional connectors are available from our Alliance Partners.

Data sources include:

- HR, ERP, and financial systems databases from several vendors such as:
  - SAP®
  - Oracle®
  - PeopleSoft®
- ODBC data sources such as:
  - Microsoft® SQL Server®
  - Microsoft® Access®
  - Oracle®
  - Other ODBC compliant data sources
- Directory Servers such as:
  - Microsoft® Exchange™
  - Microsoft® ADS™
  - Netscape®
  - Novell®
- Other data sources
  - XML data sources
  - CSV (comma separated value) data files

Any combination of two or more ODBC, XML, and text data sources can also be used to build a single chart. The *New Chart Wizard* allows the use of multiple data sources.

# OrgPublisher User Descriptions

OrgPublisher provides for multiple OrgPublisher user categories, allowing you to be specific about access and/or privileges granted to users.

For user system requirements, see Client PC Requirements.

OrgPublisher User Descriptions	
User Title	Privileges
<b>Administrators</b>	<p>The OrgPublisher application is typically installed on the chart administrator's PC; the administrator is responsible for the following chart functions:</p> <ul style="list-style-type: none"> <li>• Create</li> <li>• Format</li> <li>• Secure</li> <li>• Publish</li> </ul> <p>various types of charts, reports, and directories</p>
<b>Power End Users</b>	<p>Power end users can do the following:</p> <ul style="list-style-type: none"> <li>• Extensive printing capabilities</li> <li>• Search and Group for analysis</li> <li>• Multiple Style Options</li> <li>• Send output to PowerPoint</li> <li>• Could require restricted viewing based on role within the company</li> <li>• Access the OrgPlan Function: <ul style="list-style-type: none"> <li>– Add, delete, move boxes, departments</li> <li>– Create change report</li> <li>– Send output to another user for review</li> </ul> </li> </ul>
<b>Standard End Users</b>	<p>Standard end users can access published charts, reports, and directories, providing them with the following:</p> <ul style="list-style-type: none"> <li>• View of the organizational structure</li> <li>• General information, such as phone and e-mail</li> <li>• Limited printing capabilities</li> <li>• Limited search capabilities</li> </ul>
<b>Planning Users</b>	<p>Planning users have special privileges allowing them to:</p> <ul style="list-style-type: none"> <li>• Perform org modeling or succession planning scenarios using our web-based viewing solution</li> </ul>



# Publishing Options

Org charts are created using OrgPublisher on a Windows® platform computer (workstation or server) that provides the org chart administrator with the capabilities to select the desired data, associate the appropriate formatting characteristics to data, and publish the chart for viewing by end users.

Installation is straight forward, using a standard wizard driven interface to collect information. The installation is an executable (EXE). At this time a Microsoft® or Windows® Installer (MSI) installation version is not available.

The following table provides an overview of the requirements for each of OrgPublisher's publishing options.

Refer to the *Web Administration Installation Guide* to install OrgPublisher on a server for use by multiple administrators or to allow administrator access from any laptop or home computer.

Format	Browser	Client	Server	Criteria for Usage
Silverlight	Microsoft® Internet Explorer 7 and later Or one of the following browsers: Google Chrome™ 12, Mozilla™ Firefox®, Mac Safari® 5	Silverlight Plugin <a href="http://www.microsoft.com/getsilverlight/Get-Started/Install/Default.aspx">http://www.microsoft.com/getsilverlight/Get-Started/Install/Default.aspx</a>	Microsoft® IIS (ISAPI enabled) Windows® 2003, Windows® 2008, Windows® XP, Web server	In addition to Microsoft Internet Explorer, Silverlight is compatible with the following browsers: <ul style="list-style-type: none"> <li>• Google Chrome™ 12</li> <li>• Mozilla™ Firefox®</li> <li>• Mac Safari® 5</li> </ul> Interactive features, such as animation.  Provides searching, drilling, and view options in a rich user experience.  End user personalization and animation.
EChart Rich Client (1) Figure 3	Microsoft® Internet Explorer 6 and later	Microsoft®, Windows® XP, Windows® Vista™, and Windows® 7 and later operating system	Requires a Microsoft® IIS (ISAPI enabled) Windows® 2003 Web server, Windows®	Fast performance for medium to very large company.  Security at chart, hierarchical or field level.

Format	Browser	Client	Server	Criteria for Usage
			2008 Web server	Feature rich options for end users.  Intended for power users and regular users.
EChart Thin Client <b>(I)</b> Figure 4	Microsoft® Internet Explorer 6 and later	Cross platform such as Mac® and UNIX (With JavaScript turned off)	Requires a Microsoft® IIS (ISAPI enabled), Windows® 2003 Web server, Windows® 2008 Web server	Works in Locked Down Client Environment or Non-Windows; Security at chart, hierarchical or field level; not as many features as Rich Client.  Intended for regular users.
PluginX <b>(I)</b> Figure 5	Microsoft® Internet Explorer 6 and later	Microsoft®, Windows® XP, Windows® Vista™, or Windows 7 and later operating system	Requires a Microsoft® IIS (ISAPI enabled), Windows® 2003 Web server, Windows® 2008 Web server	Chart level Password Security; full choices for End User functionality.  Intended for all users.
HTML <b>(D)</b> Figure 6	Microsoft® Internet Explorer 6 and later	Cross platform such as UNIX and Mac	Requires a Microsoft® IIS (ISAPI enabled), Windows® 2003 Web server, Windows® 2008 Web server	Windows® or Non-Windows locked down Environment; not as many features as PluginX.  Intended for all users.
PDF <b>(D)</b> Figure 7	Free Adobe Acrobat Reader Version 9	Cross platform reader in browser	Requires a Microsoft® IIS (ISAPI enabled), Windows® 2003 Web server, Windows® 2008 Web server	You can print or email document.  Intended for all users.

Format	Browser	Client	Server	Criteria for Usage
Real-time <b>(I)</b> Figure 8	Microsoft® Internet Explorer 6 and later	Microsoft® Windows® XP, Windows® Vista™, or Windows 7 operating system	Requires Microsoft® IIS (ISAPI enabled), Windows® 2003 Web server, Windows® 2008 Web server, MDAC 2.6 and later, ASP.NET support	EChart, rich or thin client, option created from an ODBC connection to an Oracle®, SQL Server2000 or SQL Server 2005 database.  Must be published to virtual directory.  <b>Note:</b> <i>Real-time publishing is not available when building charts from multiple data sources.</i>
iPad	iPad	iPad	Microsoft® IIS (ISAPI enabled) Windows® 2003, Windows® 2008, Windows® XP, Web server	iPad v2 or higher

**I=Interactive Charts (includes advanced search, navigation, printing and querying).**

**D=Document type charts.**

## EChart Rich Client Topology

EChart Rich Client is recommended for large or secure implementations. It provides fast performance for medium to very large charts and provides field level security and Microsoft® Active Directory authentication.

It is intended for end power users and end standard users.

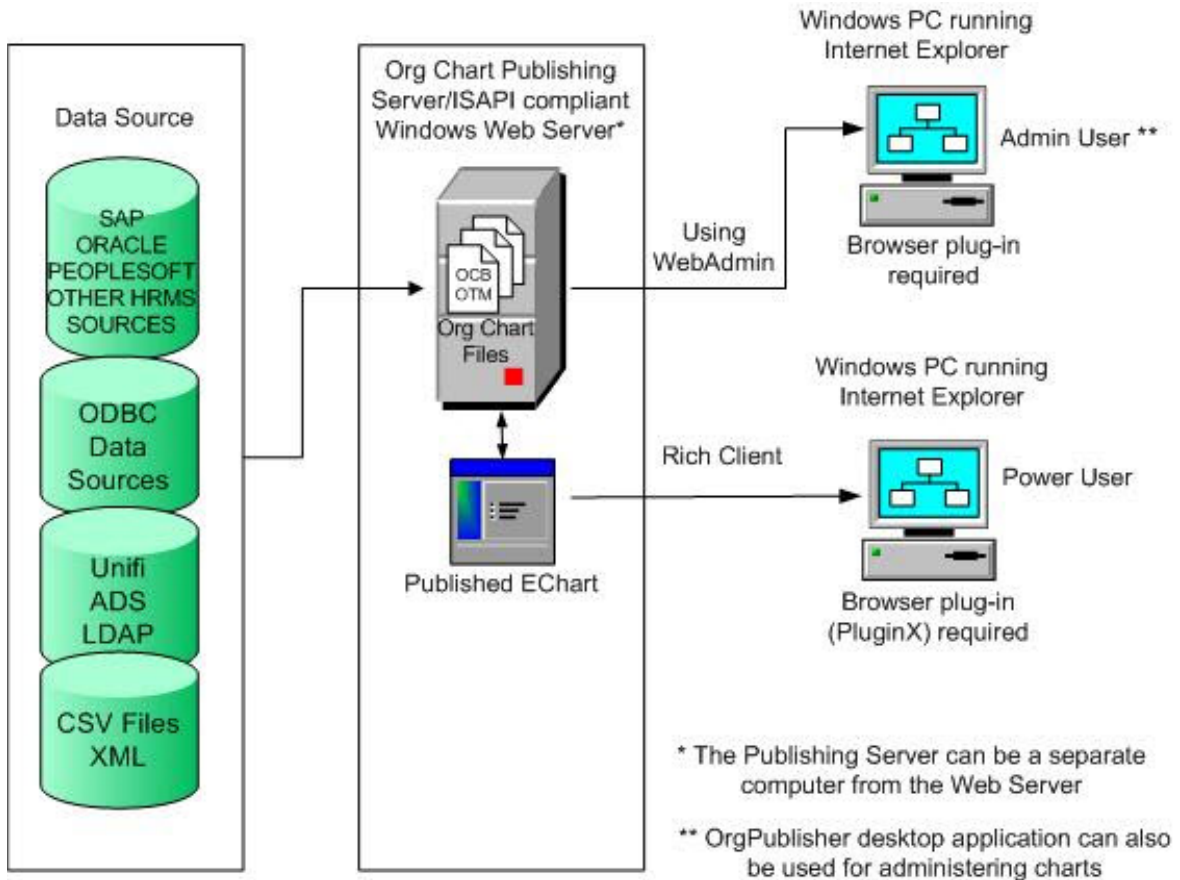


Figure 2.

## EChart Thin Client Topology

EChart Thin Client utilizes the server rather than individual user workstations to process the org chart. The EChart Thin server hardware requirements can vary depending on a number of factors, such as number of records charted, number of custom fields, concurrent users, whether the servers are dedicated to only this function or not, and so on. Ultimately, load testing in the working environment will determine the final configuration.

Thin Client works in Locked Down Client Environment or Non-Windows® Security at chart hierarchical or field level. It does not have as many features as Rich Client.

It is intended for regular users.

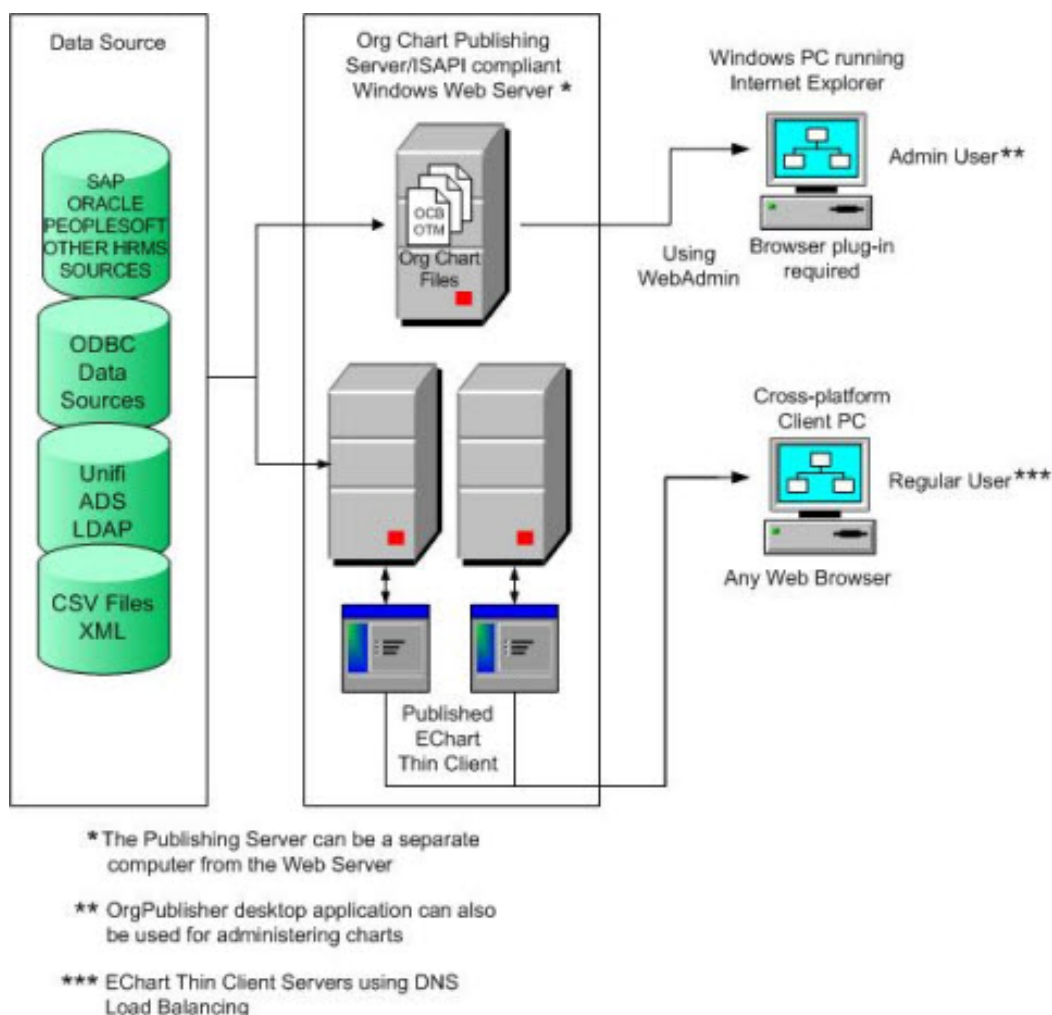


Figure 3.

## EChart Real-time Topology

Real-time charts provide users with immediate access to up-to-date information. Dynamic organizational charts are generated using real-time access for MS SQL, Oracle®, or Microsoft® Access data source, and then published in EChart format.

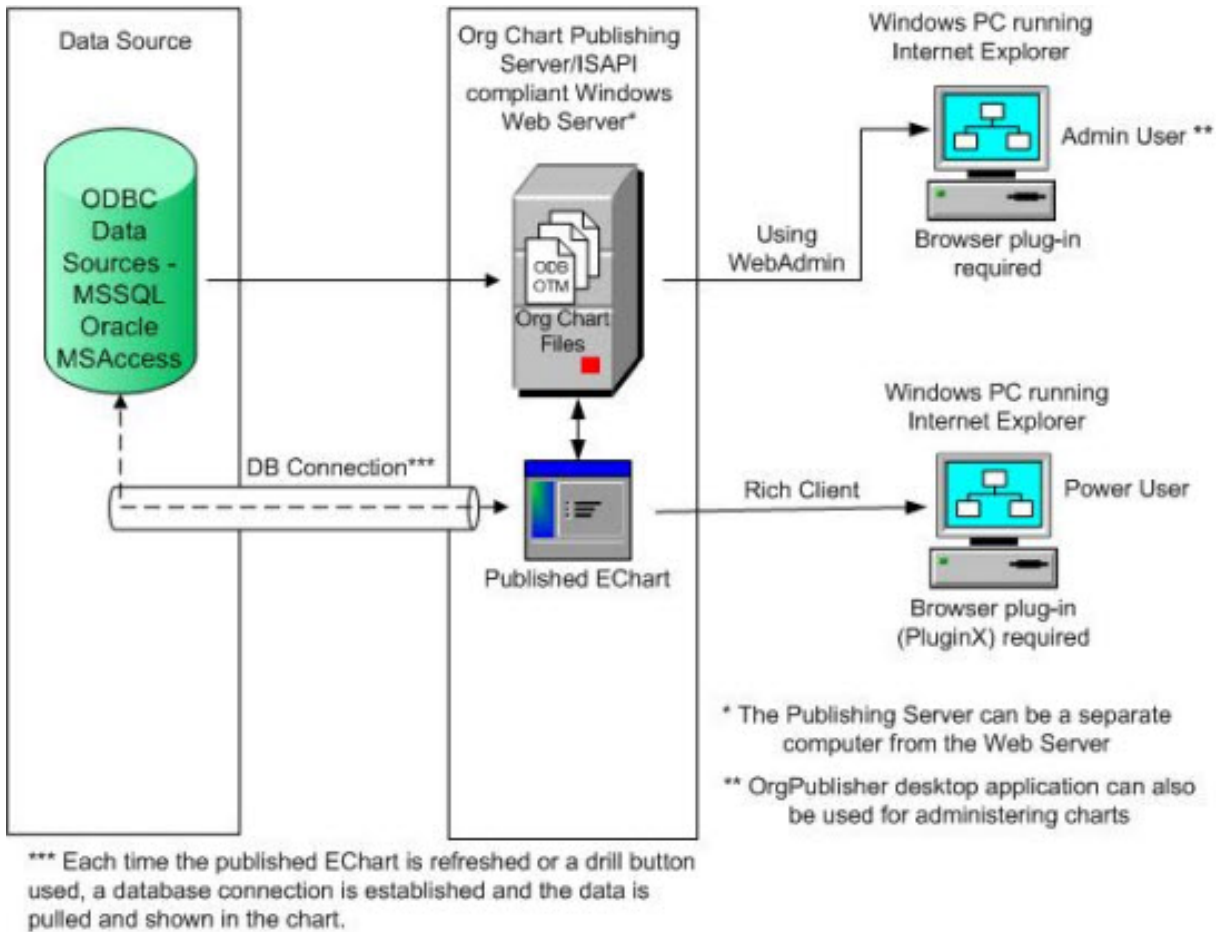


Figure 4.

## PluginX Topology

PluginX provides end users with the richest interactive experience, allowing them to navigate and search the chart, create their own groups, access hotspot links, and provide accessibility to the visually impaired.

PluginX provides chart level Password Security with full choices for user functionality.

It is intended for all users.

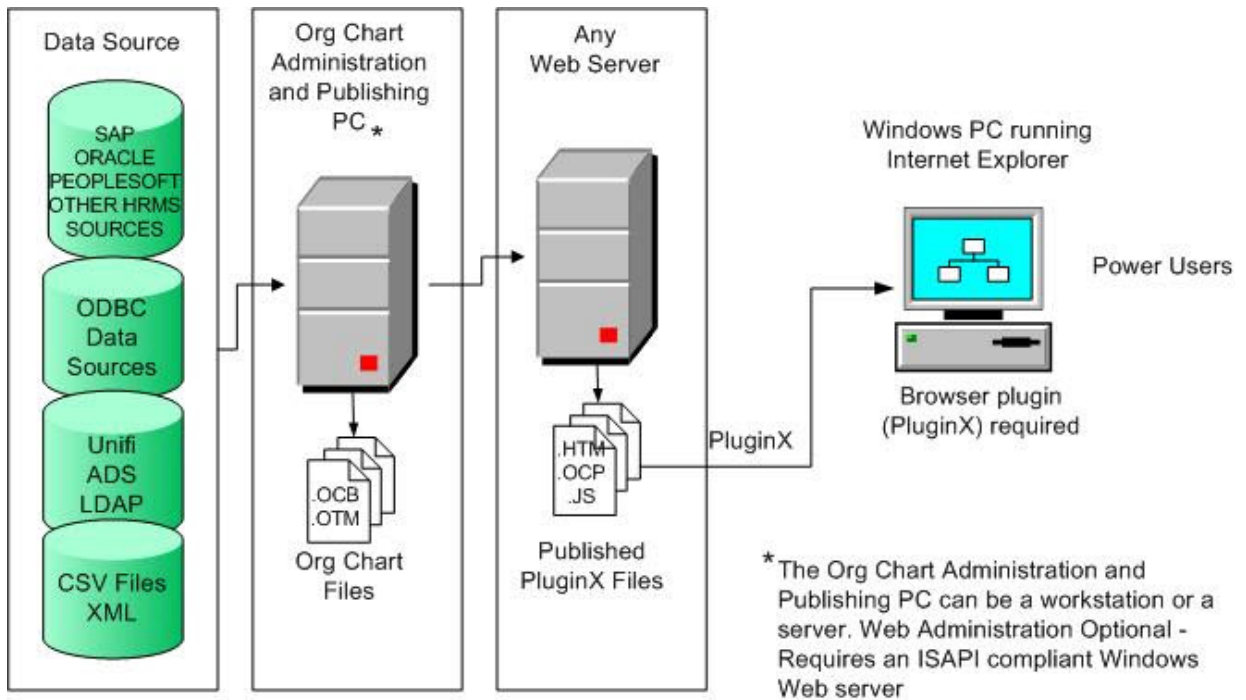


Figure 5.

## HTML Topology

HTML published charts can contain basic interactive elements, such as drilling, hotspots, displayable views, and the email to a group feature.

It operates in a Windows® or Non-Windows locked down environment. This publishing option does not provide as many features as PluginX.

HTML charts are intended for all users.

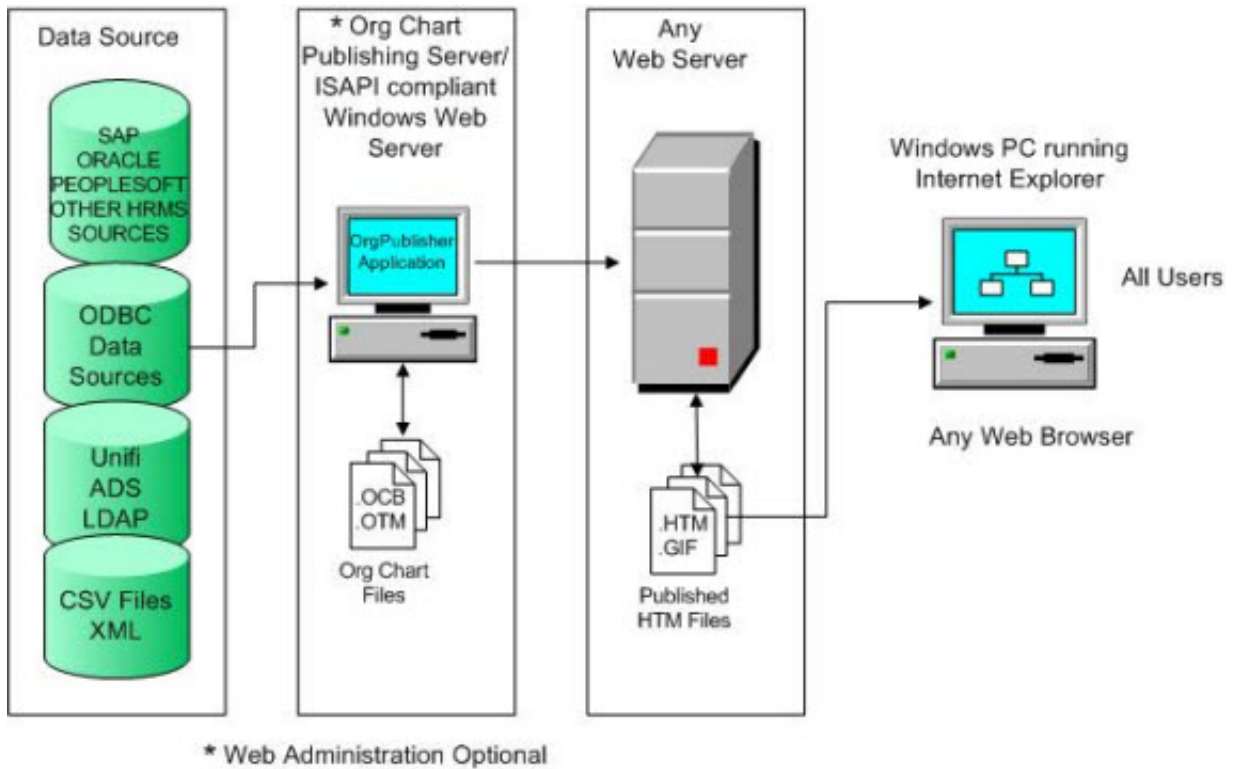


Figure 6.



## PDF Topology

With this publishing option you can choose chart styles, the top of chart box, and print in Book style. In addition, this is the EChart thin client printing option. End users must have the Adobe® Acrobat® Reader® 9 or later software installed on their PCs.

Documents published in PDF can be printed or e-mailed.

This publishing option is intended for all users.

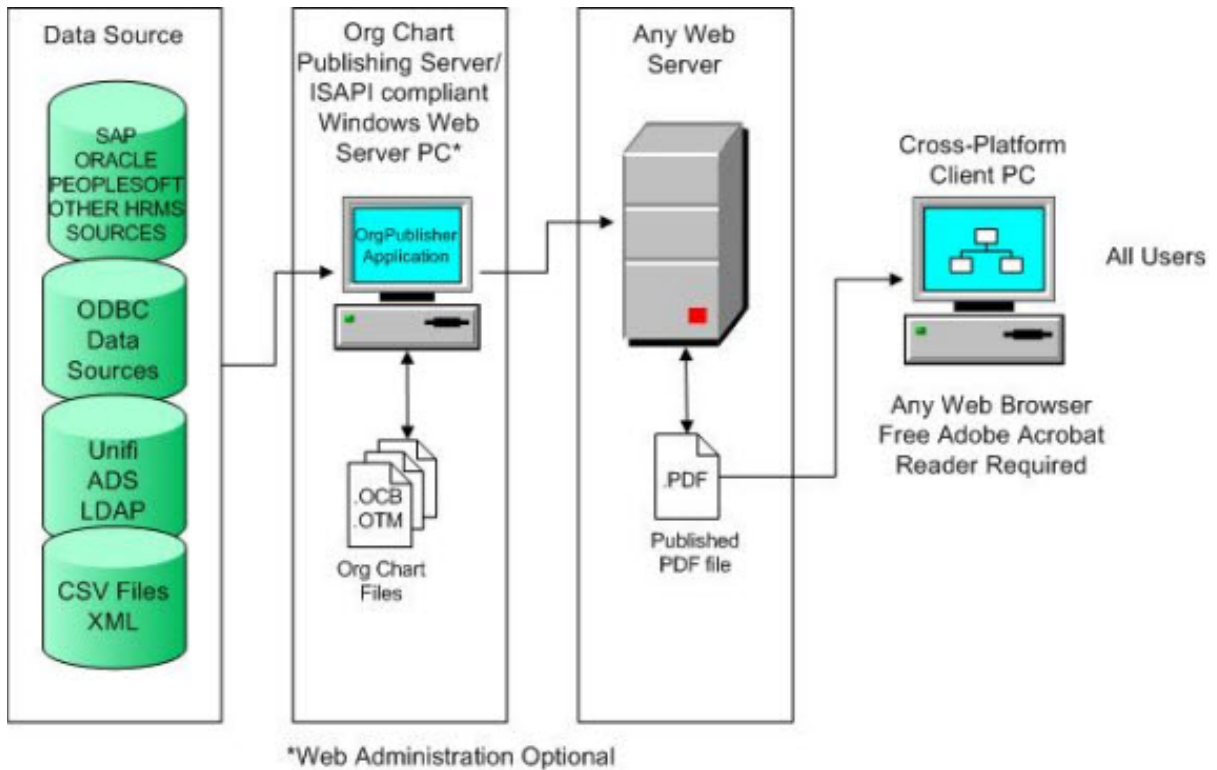


Figure 7.

# Web Administration Server Topology

OrgPublisher works much the same in Web Administration as it does in the desktop. The OrgPublisher Web Administration host runs as an ActiveX control that accesses files and data on a Web server. OrgPublisher with Web Administration is installed to a Web server and is accessed with a Web page. Because all chart files exist on the Web server, you can open any chart from any workstation.

For each server installation, a single folder is created for source charts called **SourceCharts** and another one for published charts called **PublishedCharts**. In addition, an HTML file named OPAdmin.htm is created to host the Web Administration client. Microsoft® Internet Information Server (IIS) provides security by allowing only chart administrators to access the source directory on the Web server. The IIS account must have full access to the virtual directory containing the remote server DLL. This is necessary because the server DLL reads, writes, and deletes files.

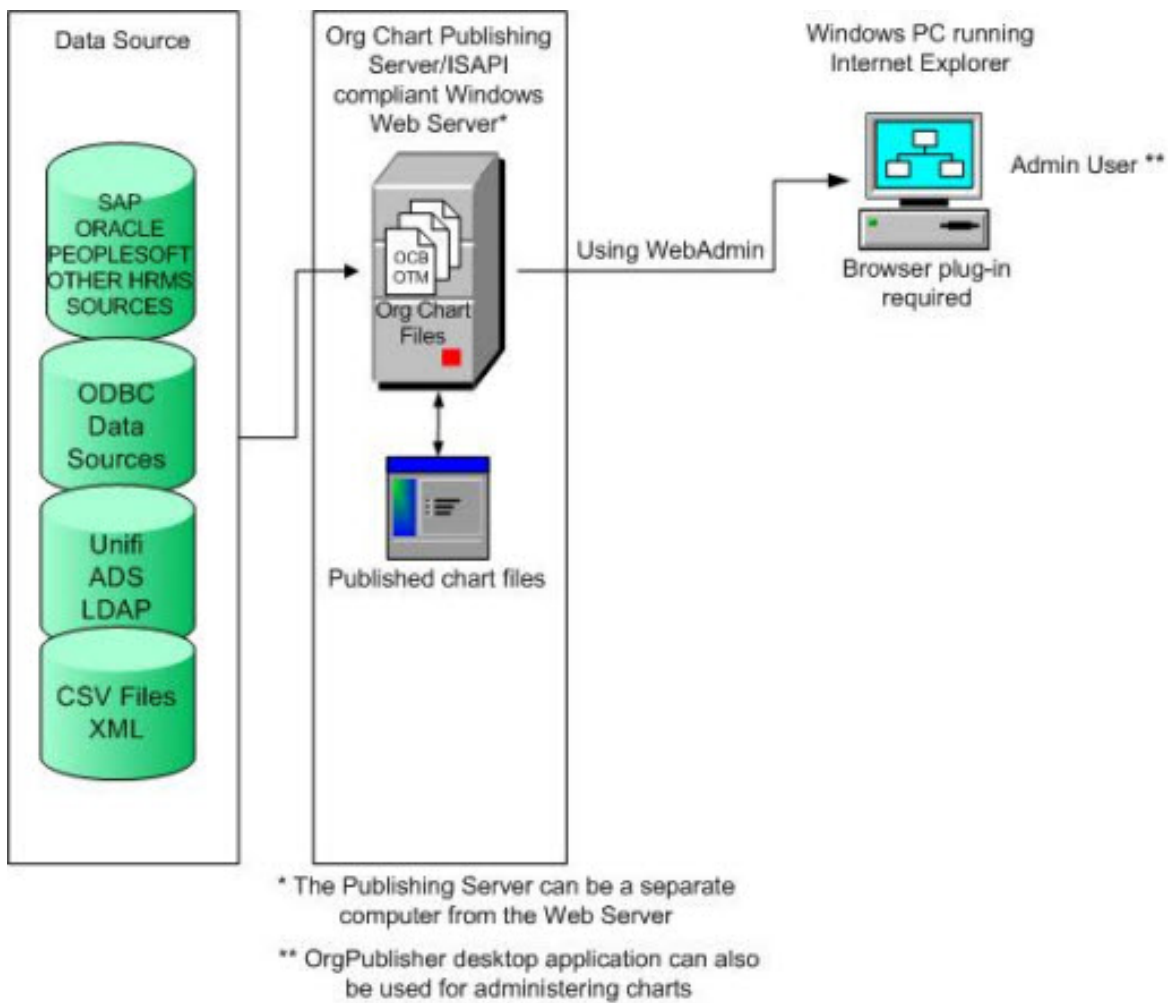


Figure 8.

# OrgPlan

OrgPlan™ provides the ability for selected individuals to create and share organizational models and succession planning. These charts contain different menus from the standard published charts.

The OrgPlan feature is available in PluginX or EChart Rich Client publishing.

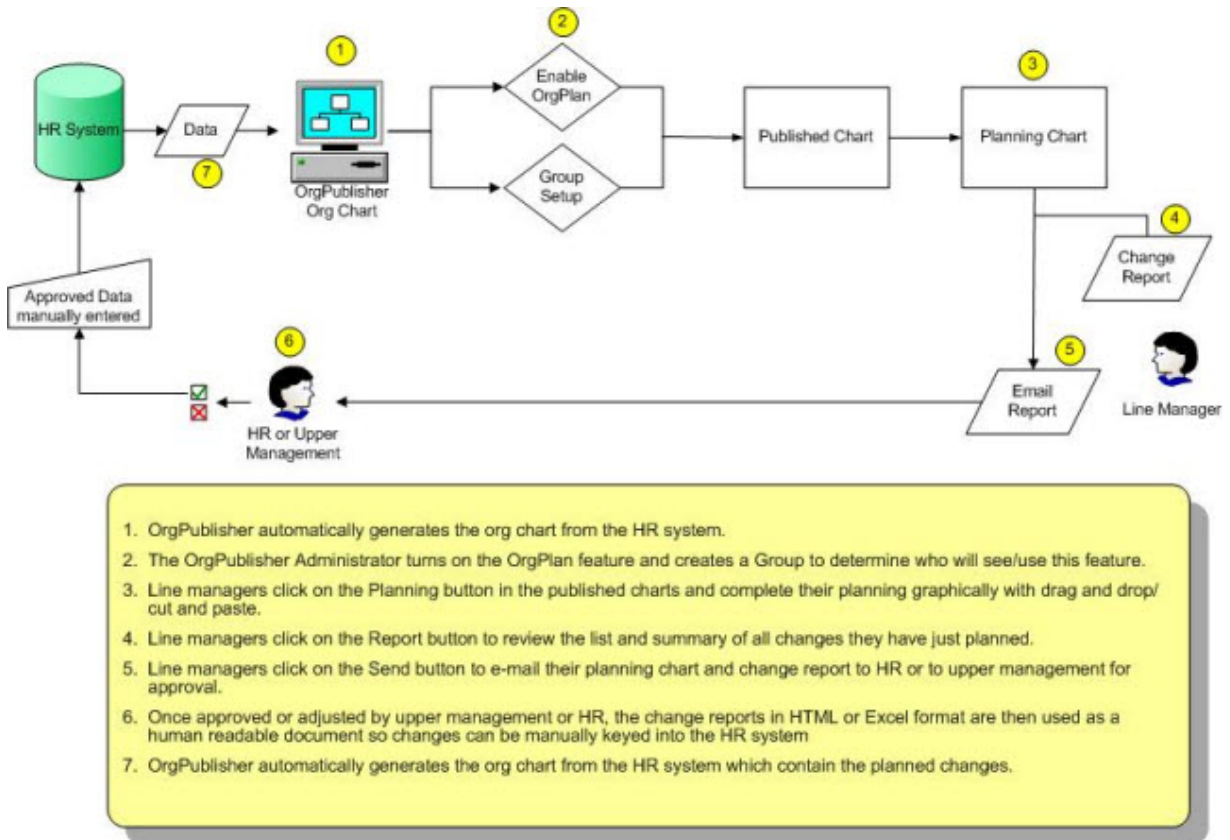


Figure 9.