Extensis
Portfolio

ADMINISTRATION GUIDE

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Portfolio Administration v3.6.3 // 6 January 2021

Contents

Introduction to Portfolio Administration **5**
- Introduction to Digital Asset Management 5
- Recent changes 6
- Configuration quick start 9
- Portfolio checklist 11

Administration tasks **12**

Basic configuration **13**
- Portfolio system types 13
- System requirements 14
- System recommendations 15
- Upgrading 18
- Software installation 20
- Licensing Portfolio 22
- Media Engines 24
- Backups 28

Users **30**
- Types of accounts 30
- Catalog roles 30
- Adding user accounts 31
- API Tokens 31
- Editing users 32

Portfolio catalogs **34**
- Creating a catalog 34
- Catalog types 34
- Catalog templates 35
- Catalogs and users 35
- Deleting a catalog 36

Advanced configuration **37**
- Roles 37
- Server data locations 38
- Configuring Active Directory 41
- Mapping users from Active Directory 42
- Portfolio logs 44
- Portfolio Web login customization 45
- Mobile uploading 45
- Configuring Single Sign-on 45

Email notifications 46
Adding SSL for secure connections 47
Ports 49
Changing the default CMYK profile 50
Converting a Watch Folder catalog to a Vault catalog 51
Moving an existing Vault 51
The Portfolio API 52
Catalog administration tasks 53
Administering catalogs 54
Renaming a catalog 54
Catalog access 54
Catalog fields 55
The Keywords field 57
Creating custom fields 59
Custom metadata 61
Custom XMP namespaces 63
Ingest settings 65
Smart Keywords 70
Reports 71
Portfolio NetPublish sites 73
NetPublish Site settings 73
Additional tasks 74
Custom catalog templates 74
Adding Watch Folders 75
Exporting a Vault catalog 76
Contacting Extensis 78
Support 79
Extensis EULA 81
Index 86

Introduction to Portfolio Administration

There are two ways to use the Portfolio Administration application: to set up Portfolio for your organization, and to configure catalogs for specific users.

The Portfolio Administrator is responsible for licensing and configuring all aspects of Portfolio, including adding users and creating catalogs.

A Catalog Administrator is a user (assigned by the Portfolio Administrator) who is responsible for fine-tuning a catalog and assigning other users to the catalog.

The Portfolio Administrator can also perform all the tasks of a Catalog Administrator in every catalog.

If you are the Portfolio Administrator, here are the main tasks you will need to perform:

1. Install Portfolio
2. License Portfolio
3. Add users
4. Create a catalog

For an overview of all Portfolio Administrator tasks, see ***Administration tasks*** on page 12.

If you are a Catalog Administrator, here are the main tasks you may need to perform:

1. Assign user roles
2. Configure asset ingest

For an overview of all Catalog Administrator tasks, see ***Catalog administration tasks*** on page 53.

Introduction to Digital Asset Management

asset ('as·et) – noun: a useful or valuable thing, person, or quality.

digital ('dij·i·dl) – adjective: relating to the use of computer technology.

digital asset: a useful or valuable computer file.

Digital assets are everywhere in the modern business world. As organizations of all sizes create critical assets for a growing range of business purposes, digital asset management (DAM) is more important than ever. DAM is a discipline to store, categorize, search, retrieve and archive digital files, such as images, documents, creative files, and audio and video clips. These digital files are referred to as assets because a significant amount of time, effort and expense goes into creating content, thus making the files valuable resources. However, the value of these assets can only be truly realized if they are accessible by everyone who needs them, when they need them.

Key Benefits of Digital Assets

Whether it's a font that's used and reused throughout a website or a video of a company gathering, all digital assets provide value of some kind. Businesses rely heavily on digital assets to build brand awareness and provide a visual identity of their products or services. And high-value assets are the ones that get a lot of eyeballs, in print or digital media, and across a variety of digital channels such as websites or social media messaging.

For a creative individual or organization, digital assets are of tremendous value—assuming they can be easily stored, organized, and retrieved.

Key Benefits of Digital Asset Management

Recent years have seen DAM adoption explode among organizations with growing numbers of digital assets. The reasons for this are straightforward:

- DAM products can integrate directly with existing creativity software, supercharging the application's functionality, streamlining your workflow, and improving productivity.
- A good DAM product is intuitive and can be quickly implemented, which translates to a rapid boost in productivity without constant support.
- DAM makes assets easily shared, which has benefits for efficiency and effectiveness.

Portfolio and DAM

- Portfolio is a scalable solution, built for collections of a few thousand to tens of millions of assets.
- Portfolio stores all file types (images, graphics, videos, text, etc.) in their highest quality formats and allows users to quickly convert them on demand.
- Portfolio protects your assets in a secure Vault, allowing your users to fit asset creation, modification, and use into their regular workflow.
- Different client applications allow editors, creatives, and managers to easily access assets based on their needs.
- Portfolio allows uploading assets from mobile devices, so users don't have to wait for someone to return to the office before they can start working.
- Portfolio allows you to publish collections of assets to a web server for the ultimate in selection and conversion convenience.
- Portfolio does all this while maintaining the integrity and security of your assets.

Recent changes

Version 3.6.3

- In version 3.6.3, we have rebuilt the Portfolio Administration application to be completely Flash-free.
- You can enable, disable, or delete NetPublish sites from Portfolio Administration; you can now perform all other site management through the Portfolio clients.
- Portfolio no longer works directly with FADEL Rights Management.
- We have changed the term **Access Level** to **Role**.

Along with the removal of Flash, we've taken the time to reorganize the Administration app to group similar functionality together.

Relocated feature	Previous version	New version
Add New API Token	Users: Add New API Token	Users: Add : API Token (option in Create User dialog) See ***API Tokens*** on page 31
Create Keywords from Path	Catalogs: (select catalog): Cataloging Options: Create Keywords from Path	Catalogs: (select catalog): Ingest: Cataloging Options: Create Keywords from Path See ***Create Keywords from Path*** on page 66
Default Access Level (now Default Role)	Global Settings: Catalog Defaults: Default Access Level	Catalogs: (select catalog): Catalog Defaults: Default Role
File and Folder Exclusions	Catalogs: (select catalog): Cataloging Options: File and Folder Exclusions	Catalogs: (select catalog): Ingest: Cataloging Options: File and Folder Exclusions ***File and Folder Exclusions*** on page 66

Relocated feature	Previous version	New version
File Types	Catalogs: (select catalog): File Types:	Catalogs: (select catalog): Ingest: Cataloging Options: File Types See ***File Types*** on page 66
Manage Catalog Fields	Catalogs: (select catalog): Manage Catalog Fields	Catalogs: (select catalog): Fields See ***Catalog fields*** on page 55 and ***Creating custom fields*** on page 59
Manage Catalog Membership	Catalogs: (select catalog): Manage Catalog Membership	Catalogs: (select catalog): Users (select role or None) See ***Catalog access*** on page 54
Manage Catalog Templates	Catalogs: (add new catalog): Catalog Template pop-up menu: Manage Custom Catalog Templates (available if custom templates exist)	Catalogs: (select catalog): Manage Catalog Templates See ***Custom catalog templates*** on page 74
NetPublish delete site	NetPublish: (choose site): Delete Site	NetPublish: (choose site): Delete Site See ***Portfolio NetPublish sites*** on page 73
NetPublish site access	NetPublish: (choose site): Access	Client: (choose catalog): NetPublish: Edit Existing Site: (choose site): Security and Request Access See ***Portfolio NetPublish sites*** on page 73
NetPublish site expiration	NetPublish: (choose site): Expiration	Client: (choose catalog): NetPublish: Edit Existing Site: (choose site): Expiration See ***Portfolio NetPublish sites*** on page 73
NetPublish site online/offline	NetPublish: (select/deselect site Online checkbox)	NetPublish: (choose site): (select/deselect Site Enabled checkbox) See ***Portfolio NetPublish sites*** on page 73
NetPublish site reporting data collection	NetPublish: (choose site): Reporting	Client: (choose catalog): NetPublish: Edit Existing Site: (choose site): Reporting See ***Portfolio NetPublish sites*** on page 73
Previews (catalog setting)	Catalogs: (select catalog): Previews	Catalogs: (select catalog): Ingest: Previews See ***Previews*** on page 68
Upload (Managed Upload)	Catalogs: (select catalog): Upload	Catalogs: (select catalog): Ingest: Managed Upload See ***Managed Upload*** on page 67

Version 3.6.2

- We have added new Smart Keyword Engines for **Art Style**, **Art Movement**, and **Art Subject**. These engines return identifying characteristics for images of artworks in your catalog.
  Art Style returns keywords such as **Art Deco**, **Rustic**, or **Shabby Chic**; **Art Movement** returns keywords such as **Classical**, **Cubism**, or **Romanticism**; and **Art Subject** returns keywords such as **Abstract**, **Food**, or **Places**.
- We now support running Portfolio on Windows Server 2019.

Version 3.6.1

Client improvements

- Portfolio now extracts and embeds metadata in JPEG 2000 files
- NetPublish allows selecting which fields to display beneath thumbnails
- NetPublish allows displaying a "Terms of Service" for your NetPublish site
- Preview mode now includes access to the **Fields** panel, so you can view and modify metadata while viewing the full image
- Preview mode allows navigating between all items if none are selected

Version 3.6

Client improvements

- Option to show only the assets in a selected folder, and not its subfolders
- Filter the gallery list by name
- Mark galleries as favorites and move them to the top of the list
- Photoshop Rating: Star ratings can be edited visually in any view (Web and Desktop clients)
- Preview Mode allows you to crop and download a copy of an asset

Administration improvements

- Licensing and activation improvements. **Learn more** on page 22.
- New reports: Most Downloaded Assets, Most Previewed Assets, Deleted Assets, Downloads, Uploads, File Types, Search Terms. **Learn more** on page 71.
- Unlimited Smart Keywords included at no charge when you have an Annual Service Agreement
- Automatically add Smart Keywords while cataloging assets

Configuration quick start

This section covers what you need to do to get your Portfolio system up and running.

If you are upgrading an existing Portfolio system, see ***Upgrading*** on page 18.

For assistance planning your Portfolio system, see ***System recommendations*** on page 15.

Installing Portfolio

1. Confirm that the system you will use with Portfolio meets or exceeds the system requirements (see ***System requirements*** on page 14).
2. Install any prerequisite software (listed along with the system requirements).
3. Update the system settings to work with Portfolio; see ***Server access*** on page 20 for details.
4. Install Portfolio and restart the system if required. See ***Install Portfolio*** on page 21.

Server configuration

1. Start Portfolio Administration by double-clicking the icon installed on the desktop.
2. Log in using the **administrator** account. The initial password is **password**.
3. Click **Status**, click **Activate Portfolio with your Extensis credentials**, enter your License Administrator's **Email** and **Password**, then click **Set Account**. See ***Licensing Portfolio*** on page 22.

Once you have activated Portfolio, here are other areas you should configure immediately:

- **Administrator password:** You should change the password for the Portfolio Administrator account. Click **Users**, click **administrator**, enter the new password, then click **Apply**.
- **Directory Services:** If your organization uses an Active Directory server to regulate user access to network resources such as email, you can configure Portfolio to use the same service. This will allow users to connect to Portfolio using the same credentials they use for network services. See ***Configuring Active Directory*** on page 41.
- **Single Sign-On:** If you have Kerberos authentication enabled on your Directory Server, you can configure Portfolio to use this service also. When a user logs in to their workstation, those same credentials will be used to log them in to Portfolio. Click **Global Settings**, then click **Single Sign-On Credentials**. Enter the **Account** and **Password** for the Service Principal Name, then click **Apply**.
- **Server Data Locations:** By default, Portfolio stores its data on the boot volume of the system it is installed on. If this volume has limited space, then you should consider changing the following storage locations, all accessed under **Global Settings**. See ***Server data locations*** on page 38.
  - **AutoSync folders:** You can determine whether Portfolio will automatically create a default data folder for Watch Folder catalogs, and where these folders are located. (The creation and location of this folder can be changed on a per-catalog basis.)
  - **Previews folder:** You can determine whether Portfolio creates preview images and clips for cataloged media, and where the preview files are saved. (The creation and location of this folder can be changed on a per-catalog basis.)
  - **Temporary Work folder:** This is where Portfolio stores temporary files, such as completed jobs that have not been downloaded. The space required for these files can be large, so you may want to place this folder elsewhere on the server or your network.
  - **Portfolio Vault folder:** The Vault contains all the data and assets for all your Vault catalogs, so it can become very large.

For information on setting up external Media Engine systems, see ***Media Engines*** on page 24.

For information on adding user accounts, see ***Users*** on page 30.

For information on creating catalogs, see ***Portfolio catalogs*** on page 34.

Portfolio checklist

Use this checklist to help you make sure you are ready to install and configure Portfolio.

☐ **License Administrator**

Be sure to have the Extensis account information (email address and password) for your Portfolio License Administrator. You need this information to activate Portfolio. See ***Licensing Portfolio*** on page 22.

☐ **Server hardware**

Make sure the system you will install Portfolio on meets the hardware and operating system requirements; see ***System requirements*** on page 14.

For a more in-depth recommendation about hardware, see ***System recommendations*** on page 15.

☐ **Prerequisite software**

Make sure your Portfolio system has the .NET 3.5 and 4.5 Frameworks (Windows) and the Adobe DNG Converter.

☐ **Portfolio Administration**

You can run Portfolio Administrator from any computer on your network that has a 1280×1024 display, 10 Mbit/s network connection, and one of these browsers: Microsoft Edge, Safari 7 or later, the latest release of Google Chrome, or the latest release of Firefox.

☐ **System account**

Make sure to install Portfolio using an account with the appropriate access permissions. See ***Server access*** on page 20.

☐ **Access to assets**

Make sure your Portfolio server system and the account you will install Portfolio under have read/write access to all the locations where you currently store your assets, or plan to in the future.

If you plan to use Vault catalogs with Portfolio, make sure to have an internal drive (rather than an externally-attached drive) with plenty of available space.

☐ **Firewall ports**

Make sure the correct ports are open in your host system's firewall. See ***Ports*** on page 49.

If these ports conflict with other software, you can choose new ports after installation. See ***Resolving port conflicts*** on page 50.

☐ **Active Directory**

If you intend to use Active Directory to map user accounts, gather the following information:

- Active Directory host name: IP address or DNS name of your directory service
- Port: The port number used to connect to your Active Directory server
- SSL: Whether you need to enable SSL in order to connect to your Active Directory server
- LDAP Bind Username: A username that has permission to query Active Directory
- Password: The password for the LDAP Bind Username

See ***Configuring Active Directory*** on page 41.

☐ **Single Sign-On**

You can utilize Single Sign-On if you run Portfolio on a Windows server and use Active Directory.

You need the Service Principal Name and password. See ***Configuring Single Sign-on*** on page 45.

☐ **Email Notifications**

If you wish to set up Email Notifications for certain events in Portfolio, you need the following information:

- Address and port for the SMTP (outgoing) mail server
- Whether the mail server requires SSL/TLS
- If the email server requires authentication, a valid email address and password
- A "reply to" email address that email recipients can reply to

See ***Email notifications*** on page 46.

☐ **Client hardware**

Make sure prospective client systems meet the hardware and OS requirements. See ***System requirements*** on page 14.

☐ **Mac client Single Sign-On**

In order for a client Mac system to use Single Sign-On, it must be joined to the Windows domain.

Administration tasks

The tasks that the Portfolio Administrator can perform are:

- **Install Portfolio**
  Check system requirements, download, and install the Portfolio server software. See ***Software installation*** on page 20.
- **License Portfolio**
  Enter credentials for the Portfolio license administrator. See ***Licensing Portfolio*** on page 22.
- **Configure additional Media Engines**
  A Media Engine is a separate system that can handle the heavy lifting of image cataloging and conversion. See ***Media Engines*** on page 24.
- **Configure Portfolio backups**
  It is always a good idea to back up your important data. See ***Backups*** on page 28.
- **Create user accounts**
  Add users from your organization to Portfolio so they can access assets. See ***Adding user accounts*** on page 31.
- **Create catalogs**
  A catalog is where your assets are stored. You can create multiple catalogs for different uses. See ***Portfolio catalogs*** on page 34.
- **Refine user roles**
  Portfolio initially has four pre-defined user roles. You can modify these, or create additional roles to fit your users' workflows. See ***Roles*** on page 37.
- **Modify server data locations**
  Portfolio has multiple data locations. You can move them depending on your organization's storage needs. See ***Server data locations*** on page 38.
- **Configure directory services**
  You can allow users to log in to Portfolio using their network credentials. See ***Configuring Active Directory*** on page 41 and ***Mapping users from Active Directory*** on page 42.
- **Customize Portfolio Web login screen**
  You can brand the Portfolio Web client for your organization. See ***Portfolio Web login customization*** on page 45.
- **Configure mobile upload**
  Users can upload images as assets from their iOS or Android device. See ***Mobile uploading*** on page 45.
- **Configure Single Sign-On**
  If your organization uses a directory service, you can also configure user accounts to connect using the credentials they use to sign in to their computer. See ***Configuring Single Sign-on*** on page 45.
- **Configure email notifications**
  Portfolio can send email notification for various events. See ***Email notifications*** on page 46.
- **Configure SSL**
  You can configure Portfolio to use a signed SSL certificate. See ***Adding SSL for secure connections*** on page 47.
- **Modify ports used by Portfolio**
  Portfolio uses several communication ports. While the default ports are not commonly used by other applications, you can change them if there is a conflict. See ***Ports*** on page 49.

Portfolio adds the Portfolio Administrator to every catalog with the role of Catalog Administrator. See ***Catalog administration tasks*** on page 53 for additional tasks associated with that role.

Basic configuration

Portfolio system types

Portfolio is a client-server system that supports three types of computers: Server, Media Engine, and Clients.

Server

The server system runs the Portfolio application: a client-server system that allows you to store your digital assets and additional information about them in catalogs, and allows users to access those assets.

Media Engine

A Media Engine system stands at the ready, waiting to be assigned media conversion and other tasks by the server. Organizations with lightweight media conversion needs probably won't need a dedicated Media Engine system, with all conversions being done on the server system. Those with intensive media processing needs can add several Media Engines to their Portfolio installation, and Portfolio will hand off jobs to the available Media Engines.

Portfolio clients

Portfolio client applications are generally lightweight in terms of system requirements. All clients connect to the Portfolio server to allow users to perform specific tasks. Administration apps allow the Portfolio Administrator and Catalog Administrators to change the Portfolio configuration. The Web and Desktop clients allow users to work with Portfolio assets.

Which client applications a user needs will depend on what they do. Often, and a user will use one client frequently and the others only occasionally.

Administration

The Administration application uses modern web technologies to allow the Portfolio Administrator to license and configure Portfolio, add users, and create catalogs.

Web client

The Portfolio Web Client runs in a browser and allows end users to add assets to catalogs, add information to assets, and use assets in other applications.

Desktop client

The Portfolio Desktop Client is a stand-alone desktop application that gives tighter integration with other desktop applications. It is the client of choice for creative types.

NetPublish client

NetPublish allows a Portfolio user to distribute content from a catalog to other interested parties via a website. The NetPublish "client" is simply a web browser that meets certain minimum requirements.

System requirements

The latest system requirements and other information is available at Portfolio System Requirements.

These requirements are the **minimum** necessary to reasonably use Portfolio on a regular basis.

A minimal Portfolio installation consists of a server system and a client system. A more typical setup will include a server, possibly one or more Media Engine systems, and multiple clients.

For a brief discussion of different Portfolio systems, see ***Portfolio system types*** on the previous page.

For a more in-depth look at server system configuration recommendations, see ***System recommendations*** on the next page.

Server and Media Engine

- An Internet connection is required for the activation and use of Portfolio.
  Please see this article for more information.
- Windows® Server 2012 R2, Windows Server 2016, or Windows Server 2019
  —OR—
  macOS™ 10.11 through 10.15 and macOS 11 (Big Sur)

  NOTE: We currently do not support running the Portfolio server or Media Engine on Apple M1 systems.
- 2.0 GHz or faster 4-core processor (8 or more processor cores will improve performance of catalogs with over 500,000 assets)
- 16 GB RAM
- 100 Mbit/s or faster network connection (between the Portfolio server system and asset storage; 1000 Mbit/s recommended)
- Microsoft® .NET Framework 3.5 and .NET Framework 4.5 (for Windows Server systems)*
- Adobe® DNG Converter for converting Raw files to DNG format

* The .NET Frameworks must be installed before you install Portfolio. The .NET Framework 4.5 is usually installed by default on Windows Server.

Portfolio Administration application

Requirements for the computer that will be used for administration. Portfolio may be administered remotely.

- 1280×1024 or higher resolution display
- 10 Mbit/s or faster network connection (100 Mbit/s recommended)
- Safari® 7 or later (macOS), or the current release of Microsoft Edge, Firefox®, or Chrome™ (Windows or macOS)

NOTE: Since Portfolio Administration and the Web Client are browser-based, you should have no issues using either on the latest Apple M1 systems. If you run into difficulties using either of these with Safari, we recommend that you switch to the latest release of Google Chrome or Firefox.

Portfolio System Requirements: `https://www.extensis.com/support/portfolio-3/system-requirements`
Activating Product Licensing for Portfolio 3: `https://help.extensis.com/hc/en-us/articles/360012060993`
Adobe DNG Converter: `https://helpx.adobe.com/photoshop/digital-negative.html`

Web client

Browser-based access to Portfolio catalogs using modern Web technologies.

- 3 GB RAM
- 1280×1024 or higher resolution display
- 10 Mbit/s or faster network connection (100 Mbit/s recommended)
- Safari 7 or later (macOS), or the current release of Microsoft Edge, Firefox, or Chrome (Windows or macOS)

> **IMPORTANT:** Microsoft has ended support for Windows 7. While Portfolio Web and Desktop will still install and run on Windows 7, we cannot guarantee to offer solutions to technical issues, especially security-related issues.

Desktop client

Desktop application supporting drag and drop.

- Windows 7, Windows 8, or Windows 10
  (64-bit only)
  —OR—
  macOS 10.10 through 10.15 and macOS 11 (Big Sur)

  > **NOTE:** We currently do not support running Portfolio Desktop on Apple M1 systems.
- 4 GB RAM
- 1280×1024 or higher resolution display
- 10 Mbit/s or faster network connection (100 Mbit/s recommended)

NetPublish sites

Supported browsers for viewing NetPublish sites.

- Microsoft Edge (for access from Windows or macOS)
- The current release of Firefox (Windows or macOS)
- The current release of Chrome (Windows or macOS)
- Safari 5.1 or later (for access from macOS)

System recommendations

These recommendations should help you better plan your Portfolio installation based on your organization's needs. These are not comprehensive and are not intended to cover every situation.

If you would like help configuring your Portfolio system, find out about our Integration and Consulting Services.

Integration and Consulting Services: `https://www.extensis.com/integration-and-consulting-services/`

Hardware

Use these general recommendations based on the number of assets you expect to have and/or the number of Portfolio users in your organization.

Total Assets*	Users (max.)	Processor Cores	Disk R/W Access	RAM	Boot Drive Space	Data Drive Free Space
< 50,000	3	4	60 MB/s	16 GB	100 GB	125 GB
< 500,000	5	4	180 MB/s	16 GB	100 GB	250 GB
< 1,000,000	10	8	250 MB/s	16 GB	150 GB	500 GB
< 5,000,000	25	12	250 MB/s	24 GB	500 GB	2.5 TB
<10,000,000	50	24	250 MB/s	32 GB	1 TB	5 TB

* All catalogs

The data drive space recommendations in this table do not include space for assets, including the Portfolio Vault. If you intend to use a Vault, you should have a very large directly-attached (internal) drive where you can locate it.

File sharing

Keep these issues in mind when you configure file sharing on your server.

On Windows Server, ensure all file sharing connections are using SMB 3.0 or higher. For Windows Server 2012 R2, see the Microsoft article, Which version of the SMB protocol are you using?

We do not recommend using a Windows-based solution that provides Apple Filing Protocol. macOS provides native read/write access to SMB shares.

NOTE: Portfolio does not support Watch Folders on Distributed File Shares (DFS).

Macintosh memory

Mac systems are sensitive to third-party memory. Although your Mac may boot properly, Portfolio's search database and Media Engine will not operate correctly on a server with memory issues. Be sure to have at least 16GB of RAM installed and verify that there are no memory issues prior to installing Portfolio.

Testing Mac memory

For a quick check to see if your memory is functioning, choose **About This Mac** from the **Apple** menu, click **System Report**, then select **Memory** under the **Hardware** category. If any memory slot shows a Status other than OK, you need to replace that memory before installing Portfolio.

For a more comprehensive memory test, download MemTest86. Instructions are included for creating a bootable USB drive to run MemTest86.

Which version of the SMB protocol are you using?: `https://blogs.technet.microsoft.com/josebda/2013/10/02/`
MemTest86: `https://www.memtest86.com/`

Drive space

We recommend that Portfolio and its data folders should all be located on internal drives in the Portfolio system. In most cases, using locally-attached or network storage will have a **significant** impact on cataloging speed, and can also adversely affect performance of the Web and Desktop clients.

In addition, on macOS an external drive (attached via USB or Thunderbolt, for example) can result in a duplicate mount point if the server unexpectedly restarts. This could lead to data loss.

NOTE: Duplicate mount points are described in this Apple document: Duplicate mount point in /Volumes after unexpected restart.

Drive divisions

We recommend using two drives (ideally, you should use separate physical drives, but volumes partitioned from a single drive can be used): the boot drive for the operating system and Portfolio software; and a data drive for assets, the Portfolio Vault, previews, temporary work (asset processing), log files, and backups.

You should relocate these folders to your data drive:

- **The Backups folder** (on page 29)
- **The Mobile Uploads folder** (on page 45)
- **AutoSync folders** (on page 39)
- **Previews folder** (on page 39)
- **Temporary Work folder** (on page 40)
- **Portfolio Vault folder** (on page 40)
- **Logs folder** (on page 40)

TIP: The nature of Watch Folder catalogs allows you to have assets located anywhere on your network. Whenever possibly, we recommend moving assets to the server using the default AutoSync folder that can be created with each Watch Folder catalog.

Duplicate mount point in /Volumes after unexpected restart: `https://support.apple.com/HT203258`

Typical folder structure
An example configuration for a catalog of about 50,000 assets that use about 1 TB of drive space would be as follows:

Boot drive, 100 GB

Operating system

Portfolio installation

Data drive, 2 TB

Assets folder (shared, for original assets in Portfolio Watch Folder catalogs)

Backups folder (for Portfolio backups)

Logs folder (for Portfolio log files)

Previews folder (for preview files and clips)

Vault folder (for the Portfolio Vault, including Vault catalog assets)

Work folder (for temporary asset processing)

Note that these sizes are minimum recommendations. Space requirements depend on the types of assets, preview size settings, and whether you utilize Portfolio asset versions, among other factors.

Upgrading

You can upgrade to the latest version of Portfolio if:

- Your current Portfolio system meets the system requirements for the latest version, especially the operating system (see ***System requirements*** on page 14);
- You are running Portfolio version 3.0 or later.

Upgrading from version 3.0 or newer

1. Verify that your current system meets the system requirements for the latest release of Portfolio (see ***System requirements*** on page 14).
   If not, you should contact your Customer Success Manager about our Integration and Consulting Services.
2. Perform a Portfolio backup and ensure that there were no errors.
3. Ensure that the Portfolio system can connect to the Extensis licensing server (see ***Validating the licensing server*** below).
4. Stop Portfolio and install the latest version.
   Installers are available from Portfolio 3 Support.

Validating the licensing server

To ensure that your system can connect to the Extensis licensing server, use OpenSSL. This is available from the command line in macOS; for Windows, you can download a pre-compiled binary from https://indy.fulgan.com/SSL/.

- On macOS, start Terminal and enter
  `openssl s_client -connect cwsg.extensis.com:443 -servername cwsg.extensis.com`
- On Windows, launch the OpenSSL application and enter
  `s_client -connect cwsg.extensis.com:443 -servername cwsg.extensis.com`

  TIP: You can also start OpenSSL from the Windows command line:
  `openssl.exe s_client -connect cwsg.extensis.com:443 -servername cwsg.extensis.com`
  (Of course, you need to run this from the OpenSSL directory, or add the OpenSSL directory to your system PATH.)

If the connection is successful, the command output will start with something similar to this:

```
CONNECTED(00000006)
depth=2 C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root
CA verify return:1
depth=1 C = US, O = DigiCert Inc, CN = DigiCert SHA2 Secure Server CA
verify return:1
depth=0 C = US, ST = Oregon, L = Portland, O = Extensis, CN = *.extensis.com verify
return:1
---
Certificate chain
0 s:/C=US/ST=Oregon/L=Portland/O=Extensis/CN=*.extensis.com i:/C=US/O=DigiCert
Inc/CN=DigiCert SHA2 Secure Server CA
1 s:/C=US/O=DigiCert Inc/CN=DigiCert SHA2 Secure Server CA
i:/C=US/O=DigiCert Inc/OU=www.digicert.com/CN=DigiCert Global Root CA
2 s:/C=US/O=DigiCert Inc/OU=www.digicert.com/CN=DigiCert Global Root CA
i:/C=US/O=DigiCert Inc/OU=www.digicert.com/CN=DigiCert Global Root CA
---
Server certificate
-----BEGIN CERTIFICATE-----
MIIFGTCCBAGgAwIBAgIQBG2i98PNzGTcpHyGGBtPXTANBgkqhkiG9w0BAQsFADBN
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMScwJQYDVQQDEx5E
```

Integration and Consulting Services: https://www.extensis.com/integration-and-consulting-services/
Portfolio 3 Support: https://www.extensis.com/support/portfolio-3/
OpenSSL for Windows: https://indy.fulgan.com/SSL/

If the connection fails, the output will start with something similar to this:

```
CONNECTED(00000006)
4630365804:error:14004410:SSL routines:CONNECT_CR_SRVR_HELLO:sslv3 alert handshake
failure:/BuildRoot/Library/Caches/com.apple.xbs/Sources/libressl/libressl-
22.260.1/li bressl-2.6/ssl/ssl_pkt.c:1205:SSL alert number 40
4630365804:error:140040E5:SSL routines:CONNECT_CR_SRVR_HELLO:ssl handshake
failure:/BuildRoot/Library/Caches/com.apple.xbs/Sources/libressl/libressl-
22.260.1/li bressl-2.6/ssl/ssl_pkt.c:585:
---
no peer certificate available
---
No client certificate CA names sent
---
SSL handshake has read 7 bytes and written 0 bytes
```

Software installation

Prerequisites

Before installing Portfolio, be sure to install all the prerequisite software.

For Windows Server you need to install versions 3.5 and 4.5 of the Microsoft .NET Framework. Version 4.5 is usually installed by default, but you should confirm this.

For Windows and macOS you need to install the Adobe DNG Converter.

See ***System requirements*** on page 14 for additional information.

Server access

When you install Portfolio on your server system, it needs to be installed under a computer account with specific access.

Windows

On Windows, Portfolio needs to be installed under an account that is a local administrator, has "Log on as a service" privilege, and has read/write access to all locations with files that you intend to catalog.

The account can be a local system account, but if you will be cataloging assets from any network locations then you need to use a Domain User account.

Domain User account option

You should configure a special Domain User account for the Portfolio server before you install Portfolio. This account should be configured as follows:

- The account should have a password that is set to never expire.
- The account needs to be a member of the local Administrators group, so that it has full control over the Portfolio program directory and system files.
- The account must be granted the **Log on as a service** privilege in the Local Security Policy console (so that it can run as a Windows service).
- The account must have full read/write access to all network locations that contain files that you intend to catalog and make available to users of Portfolio.

During the installation process on Windows, click **Options**. Choose **Domain\User**, enter the network login credentials in the form `domain\username`, then enter the network password for that account and click **OK**.

Local System account option

If you install Portfolio on a Windows system that holds all of the files you intend to catalog and make available to users of Portfolio, you can use a Local System account.

You should configure the local account before you install Portfolio.

- The local account needs to be an administrator, so that it has control of the Portfolio program directory and system files.
- The local account must have the **Log on as a service** privilege assigned through the Local Security Policy console.
- The account must have full read/write access to all network locations that contain files that you intend to catalog and make available to users of Portfolio.

macOS

Planning your Mac installation

On macOS, Portfolio runs under the user account that is logged in at the time of installation. This user account must have read/write access to all network locations with files that you intend to catalog.

Other things to be aware of:

- If you have remote volumes mounted for cataloging, the Portfolio account must remain logged in to the computer for these volumes to be continuously available to Portfolio. (You can lock the computer's screen, however.)
- To drag and drop assets from the Portfolio Desktop client, the client system must be able to mount any remote volumes where assets are stored. (This applies only to Watch Folder catalogs.)

Configure your firewall

If there is a firewall between your Portfolio server and the users that need to connect to it, you must open some ports on the firewall.

If your firewall is on your Portfolio system, you need to open these ports to allow others on your network to access the server; if your firewall is between your network and the Internet, you need to open these ports to allow users outside your network to access your server.

You should make sure these ports are open before installing Portfolio. See ***Ports*** on page 49.

Install Portfolio

Download the Portfolio installer for your platform from Portfolio 3 Support.

Double-click the installer icon and allow it to guide you.

Windows users: In the first screen of the installer, click **Options** and choose whether to install Portfolio to a Local System account or a Domain User account.

At the end of the installation, the Portfolio Administration application automatically opens in your default web browser.

Licensing Portfolio

After Portfolio is installed, you will need to license the software through Portfolio Administration before doing anything else.

To start Portfolio Administration, start your browser, then enter the IP address of the server system, followed by `:8091` for the port number. For example:

```
12.34.56.78:8091
```

If you are running Portfolio Administration from the Portfolio system, you can use

```
localhost:8091
```

To log in, enter the user name **administrator** and the password **password**.

Trial version

You can request a 30-day free trial of Portfolio in order to assess all of Portfolio's features. To request a trial, fill out the form at https://www.extensis.com/request-a-trial-portfolio/. A representative from Extensis will contact you.

To license the trial version:

1. Start the Portfolio Administration application and log in.
2. Click **Status** on the left.
3. Click **Try Portfolio for a limited time with a Demo Serial Number**.
4. Enter the license codes that you received from Extensis and click **Add Licenses**.

Full license

In order to activate your installation of Portfolio, you need to enter an email address and password one time.

1. Start the Portfolio Administration application and log in.
2. Click **Status** on the left.
3. Click **Activate Portfolio with your Extensis credentials**.
4. In the **Set Extensis Account** dialog, enter the **Email** and **Password** of your License Administrator and click **Set Account**. (For more information, see ***The License Administrator*** on the next page.)

Portfolio will contact Extensis to determine your Portfolio license information and activate your installation of Portfolio.

If your organization has multiple purchases of Portfolio with the same License Administrator, you will be presented with a list of possible licenses; select the appropriate one from the list and click **Save**.

Adding more features

Your organization can purchase additional user seats, a higher asset count, or additional features for your Portfolio installation.

Contact your Customer Success Manager for information about what is available for your installation.

You can also follow the link **Click to upgrade the Portfolio Server** link in the **Status** panel, then submit a request for details about other features that are available for your installation of Portfolio.

Once any additional features are added, they will be available in your Portfolio installation automatically.

Refreshing your activation

If some newly-added features don't appear in your Portfolio installation, you can refresh your activation. This requires an internet connection.

To refresh your activation:

1. Open the Portfolio Administration application.
2. Click **Status** on the left.
3. Click the email address for your License Administrator in the **Account** section of the **Status** panel.
4. Enter the License Administrator **Password**.
5. Click **Set Account**.

The License Administrator

For new licenses, the License Administrator is the person designated as your organization's contact when the order for Portfolio is placed with Extensis or an authorized reseller.

For Portfolio upgrades, the License Administrator is the person who registered your current license.

If you need to find or change your License Administrator, please use this form: https://help.extensis.com/hc/en-us/requests/new/. Enter this information:

- **Your email address**
- **Subject:** Enter "Portfolio License Administrator"
- **Description:** Please identify whether you need to find who your License Administrator is, or to change your License Administrator. Be sure to include the name and email address of the new License Administrator.
- **Support Type:** Choose "Account Issue"
- **Product:** Choose "Portfolio"

Deactivating Portfolio

If you need to remove the license from your installation of Portfolio (for instance, if you need to move it to another system):

1. Open the Portfolio Administration application.
2. Click **Status** on the left.
3. Click the email address for your License Administrator in the **Account** section of the **Status** panel.
4. Click **Remove Account**.

Behind a firewall

If your Portfolio system is behind a firewall that is usually not allowed open access to the Internet, you need to permanently open port 443 in your firewall.

Portfolio requires this open connection to the Internet in order to confirm licensing.

Administrator password

You should change the Portfolio Administrator password as soon after installation as possible. This prevents unauthorized users from making changes to your server configuration.

To change the administrator password:

1. Click **Users**.
2. From the list of users, select **administrator**.
3. In the **Account** pane, enter a new password into the **Password** field.
4. Click **Apply**.

> **IMPORTANT:** Write down the new administrator password and keep it in a safe place. It is not easy to recover a lost administrator password. The administrator account is the **only** account that can access Administration to make changes to the server, such as adding user accounts or new catalogs. Losing the administrator password may require you to completely re-install Portfolio.

Media Engines

Portfolio includes the ability to catalog all kinds of assets and provide conversion to JPG, TIFF, DNG, and MrSID formats. With additional Media Engines, you can extend Portfolio to support a wider variety of file conversions, add watermarks to assets in Portfolio NetPublish, and configure external stand-alone Media Engine systems.

> **NOTE:** Portfolio Web, Desktop, and NetPublish users gain access to these new features when you add a Media Engine license. You do not need to configure an external Media Engine system in order to add the file conversion and watermarking capabilities.

Configuring an external Media Engine is optional but recommended if users will be routinely cataloging or converting video or GIS assets.

Adding a Media Engine license

To determine how many Media Engines you are licensed for, look at the **Status** page in Portfolio Administration. The second panel, showing the Portfolio version and licensed components, also shows how many Media Engines are in use (and how many are licensed in total).

To add a license for an additional Media Engine, contact your Customer Success Manager at Extensis. Once the transaction is complete, the Media Engine count in the **Status** page should reflect this. If it doesn't reflect this immediately, you can refresh the information. See ***Adding more features*** on the previous page.

Installing the Media Engine software

NOTE: Since Portfolio includes a built-in Media Engine, the Portfolio Media Engine installer does not allow installation on the same computer as Portfolio.

Follow these steps to install and configure an external Media Engine:

1. Verify the system requirements.
   The Media Engine system has the same requirements as the Portfolio server system. See ***System requirements*** on page 14.
2. Install prerequisite software on your Media Engine system.
   You should install the Adobe DNG Converter so that Portfolio can export Camera Raw images in Adobe's Digital Negative (DNG) format.

   > **NOTE:** When installing prerequisite software on macOS, you must log in to the Media Engine computer using the same account that you intend to use to install and run the Portfolio Media Engine.

3. Install the Media Engine software.
   Download the installer for your platform from Portfolio 3 Support. Run the installer and follow the on-screen prompts.
   If you are installing the Media Engine on a Windows server, use the same Domain User account that you used when you installed Portfolio.

> **MIXING MEDIA ENGINE OPERATING SYSTEMS**
> You can run Portfolio and external Media Engine systems on different OSes. If you do, you should make sure that any macOS systems mount any required volumes using the SMB protocol, not Apple Filing Protocol (AFP).

Network access for Media Engines

The Media Engine system has to have read/write access to all locations where assets are stored. For a macOS Media Engine, all network storage locations must be mounted for the Media Engine to be able to access them.

By default, Portfolio communicates with Media Engines using port 9877. Windows networking (SMB) uses port 445, and Apple Filling Protocol (AFP) uses port 548 by default. Make sure these ports are open on your Portfolio system and all Media Engine systems.

Configuring external Media Engines

The **Media Engines** panel in the Portfolio Administration application indicates the number of Media Engine seats available. If all your Media Engines are external to Portfolio, you will need to disable the built-in Media Engine.

> **NOTE:** All connected users will need to reconnect after you modify Media Engine settings.

To disable the default Media Engine:

1. Click **Global Settings**, then click **Media Engines**.
2. Clear the **Active** status for the **localhost** Media Engine.
3. Dismiss the warning message indicating that you do not have a Media Engine enabled.

You are now ready to add and enable external Media Engines.

To add a Media Engine to Portfolio:

1. Click **Global Settings**, then click **Media Engines**.
2. Click **Add**.
3. In the **Add New Media Engine** dialog, enter the **Address** and **Port** of the Media Engine system.
   The default port for external Media Engines is 9877.
4. Enable the **Active** option for the Media Engine and click **Add**.
   NOTE: If the **Active** option is disabled, Portfolio will not use that Media Engine for processing tasks.
5. To test the connection to the new Media Engine, click **Test**.

Updating port settings for external Media Engines

The default port used by external Media Engines is port 9877. You can change this.

To change the Media Engine port:

1. Open the `server.xml` file with TextEdit (Mac) or Notepad (Windows) from the following location on the Media Engine system:
   Windows: `C:\Program Files\Extensis\Portfolio\Media Engine\applications\tomcat\servers\media-delegate\conf\`
   Mac: `/Applications/Extensis/Portfolio/Media Engine/applications/tomcat/servers/media-delegate/conf/`
2. Locate the following block of text in the `server.xml` file. (Be aware that there is a similar section of code that is commented out; be sure to edit the correct text.)

```
<Connector port="9877"
    protocol="HTTP/1.1"
    connectionTimeout="20000"
    redirectPort="8443" />
```

   Replace the `port` value (9877 by default) with the desired value.
3. Save the `server.xml` file and restart the Media Engine.

If you change the port for one external Media Engine, you must change it for all systems, and also replace the Media Engine definition in Portfolio Administration.

To replace the Media Engine:

1. Click **Global Settings**, then click **Media Engines**.
2. Deactivate the Media Engine that you will replace.
   Make a note of the Media Engine's address.
3. Click **Add**.
4. Enter the **Address** of the original Media Engine, enter the updated **Port**, then click **Add**.
5. Activate the new Media Engine, then click **Test**.
6. If your new Media Engine is working correctly, then select the original Media Engine and click **Remove**.

Restarting external Media Engines

Administrators may restart external Media Engines independently of Portfolio.

To restart an external Media Engine on Windows:

1. In Portfolio Administration, click **Global Settings**, then click **Media Engines**.
2. Clear the **Active** option for the Media Engine that you want to restart.
3. On the Media Engine system, open the Services browser by choosing **Start > Administrative Tools > Services**.
4. Locate the **Portfolio Media Engine** service in the list and click **Restart Service** on the toolbar.
5. After the service has started, return to the Administration application. From the **Media Engines** page, enable the Media Engine.

To stop and start an external Media Engine on Mac:

1. In Portfolio Administration, click **Global Settings**, then click **Media Engines**.
2. Clear the **Active** option for the Media Engine that you want to restart.
3. Open the **Terminal** application (inside the Utilities folder in the Applications folder).
4. Using a macOS Administrator account on the Media Engine system, enter the following command to stop the Media Engine:
   ```
   sudo launchctl unload
      /Library/LaunchDaemons/com.extensis.portfolio.server.media.delegate.plist
   ```
5. When prompted, enter your system administrator password.
6. Enter the following command to start the Media Engine:
   ```
   sudo launchctl load
      /Library/LaunchDaemons/com.extensis.portfolio.server.media.delegate.plist
   ```
7. Return to the Administration application. From the **Media Engines** page, enable the Media Engine.

Backups

Portfolio has a built-in function to back up (or restore) its database and other relevant data.

You can perform backups manually at any time. You can also schedule Portfolio to make regular backups at a specific time on specific days.

To save a backup immediately, click **Backup Now**.

The following information is backed up:

- Portfolio database
- Portfolio NetPublish sites
- Portfolio reporting data

Portfolio **does not** back up your assets or preview images. You need to back these up separately using a third-party backup utility.

To configure automatic backups:

1. Click **Backup/Restore**.
2. In the second panel, select the days of the week that you would like to perform backups, then select the time of day for each backup.
   NOTE: The Portfolio Server will be stopped—and unavailable to client connections—during the backup.
3. In the third panel, you can select a location to store the Portfolio backups. See ***The Backups folder*** on the next page.
4. You can also specify how many backups to keep. (Portfolio will discard the oldest backup when this number is exceeded.)
5. Finally, you can opt to receive email notifications about backups. Make sure that the **administrator** account has a valid email address, check the box labeled **Send email notifications after backups and restores**, then configure email notifications. See ***Email notifications*** on page 46.

To restore a backup, click **Restore From Backup**, select the file to restore, then click **Select**.

Making a Vault snapshot

If you are using Vault catalogs, it is important that neither the Portfolio database nor the Vault assets change while the other is being backed up; the two backups need to make one "logical" snapshot of your Portfolio data. The best and easiest way to do this is:

1. Shut down Portfolio (note that Portfolio Administration still functions while Portfolio itself has been stopped).
2. Back up your Portfolio data.
3. Back up the Vault **and** your Portfolio backup using a third-party backup utility.
   By backing up everything at the same time and keeping it together, you have a complete snapshot of your Portfolio data.
4. Optionally, back up your preview directory. (See ***Backing up preview images*** on the next page below.)
   In case of a catastrophic failure where you need to restore your data from a backup, the previews can be recreated; having the backup can save some time but is not absolutely necessary.
5. Start Portfolio.

To locate your Vault, click **Global Settings**, then click **Server Data Locations** and make note of the Portfolio Vault folder.

The Backups folder

To change the location where Portfolio stores its backups:

1. Click **Status**, then click **Stop Portfolio**.
2. Click **Backup/Restore**.
3. Click **Browse** next to **Store in Directory**.
4. Browse to the desired backup folder, then click **Select**.
   The folder that you select must be read/write accessible to the Portfolio server.
5. Click **Status**, then click **Start Portfolio**.

Backing up preview images

You can back up Portfolio's preview images to save time if you need to restore a backup.

To find where Portfolio saves previews by default:

1. Click **Global Settings**, then click **Server Data Locations**.
2. Make a note of the Previews path (under **Save Previews for new catalogs in this folder**).

Back up this folder with a third-party backup tool.

If you have changed the location of the Preview folder for any individual catalogs, those previews will not be backed up with the default Previews folder.

To find where an individual catalog's previews are stored:

1. Click **Catalogs** and select a catalog.
2. Click **Ingest**, then click **Previews**.
3. Make a note of the path to the catalog's previews, displayed at the bottom of the **Previews** panel.

Back up this directory separately.

> **TIP:** It's a good idea to keep all preview images in one location. See ***Previews folder*** on page 39 for more information about the Previews folder.

Users

Any person that needs to access Portfolio through a client application needs to have a Portfolio user account.

You assign each user a role in a catalog in order to allow them to access assets in that catalog. What a user can do with assets from a catalog is determined by their role within that catalog.

Types of accounts

There are two types of user account: Native and Directory Service.

Native Portfolio accounts are created within and maintained by Portfolio. Users must log in manually and accounts cannot be assigned a role as part of a group.

Directory Service accounts are provided by an Active Directory (AD) or Open Directory (OD) service on your network.

A catalog can accommodate both native and Directory Service accounts.

> **NOTE:** In order for a Catalog Administrator to access Portfolio Administration, they must use a native Portfolio account.

Catalog roles

An individual user may need to perform different tasks with assets in different catalogs.

You give a user access to a catalog by assigning them a role in that catalog.

There are four roles, with increasing capabilities: Reader, Editor, Publisher, and Catalog Administrator.

In general, the Reader role is for users who primarily need to find assets; Editor is for users who need to enter data about existing assets; Publisher is for users who need to add assets to or remove assets from a catalog; and Catalog Administrator can perform any action on assets within the catalog, and modify some aspects of the catalog itself (in Portfolio Administration).

For details, see ***Roles*** on page 37.

Default role

The Portfolio Administrator can set the default role for users. When adding a new user, this is the role that is selected in the pop-up for the option **Add user to all catalogs as: (role)**.

To change the default role, click **Catalogs**, select any catalog, then choose the new default role from the pop-up menu in the **Catalog Defaults** panel.

Adding user accounts

To add a user account:

1. Click **Users**.
2. Click **Add** above the list of users.
3. In the **Create User** dialog, enter an **Account Name**.
4. Enter a password.
5. Enter additional user details.
   You should assign a valid email address to each user. Users can request email notification when certain galleries have been modified but need to have an email address associated with their account.
6. You can choose to assign the new user a role in all current and future catalogs automatically; select **Add user to all catalogs as** and specify the **Role** from the pop-up menu. (A Catalog Administrator can change a user's role in a catalog from the **Catalogs** panel.)
7. Click **Create**.

To edit information for an existing user, see ***Editing users*** on the next page.

> **NOTE:** You can also map users and groups from a directory service to Portfolio catalogs. See ***Mapping users from Active Directory*** on page 42.

API Tokens

An API Token is a pseudo-user account that is useful for anyone developing an application using the Portfolio REST API.

Usually, an API-based app would need to log in to the Portfolio API and get a session ID, which would need to be renewed when its session with Portfolio times out.

Instead, you can create an API Token which the developer can use to connect to the API, bypassing the need for additional session management.

The API Token can be assigned any role in any and all catalogs.

The permissions that a session using an API Token has depend on its role in each catalog.

Connections using an API Token do not count against the number of user connections available to your Portfolio installation.

To generate an API Token:

1. Click **Users**.
2. Click **Add** at the top of the **Users** pane.
3. Enter an **Account Name** for the token.
4. Select the option **Add New API Token**.
5. Select **Add user to all catalogs as**, then select a **Role** from the drop-down menu.
6. Click **Create**.
7. Select the new token in the list of users on the left.
8. Make a note of the **Token** value; you use it instead of a session ID in calls to the REST API.
   When using an API Token, you do not need to call `service.login` to get a session ID, so your connection will never time out, and it does not count against the number of user connections available to your Portfolio installation.

To change a token's access to a catalog:

1. Click **Catalogs** and select a catalog.
2. Click **Users** at the top of the **Catalogs** pane.
3. Click the pop-up menu in the **Role** column for the token account, then do one of the following:
   - **To change the user's role,** choose a new role from the pop-up menu, then click **Change Role** in the confirmation dialog.
   - **To remove the user from the catalog,** choose **None** from the pop-up menu, then click **Remove** in the confirmation dialog.

For more information about the Portfolio API, see ***The Portfolio API*** on page 52.

Editing users

Editing user account information

The Portfolio Administrator can quickly update user account information, including the user account name, password, and full name.

> **NOTE:** For user accounts from a directory service, you can only edit the **Notes** information.

To update a user's account information:

1. Click **Users** and select a user.
2. Change any required user account information, such as **Password** or **Full Name**.
   Authentication: If you have bound Portfolio to a directory service, you can change a user's account to use Directory Service authentication. The Portfolio account name must match the user's directory service account name. The user can then access Portfolio catalogs using their network login name and password.

   > **NOTE:** If you change a native account to use Directory Service authentication, then change that account back to a native account, the account's original password will be retained. However, if you change an account that was originally created using Directory Service authentication to a native account, you will need to add a password for the account.
3. Click **Apply** to save changes.

Removing user accounts

The Portfolio Administrator can remove users entirely from Portfolio.

To remove users from Portfolio:

1. Click **Users** and select one or more users.
2. Click **Remove** above the list of users.
3. Determine what should be done with the users' private galleries (**Made Public** or **Permanently Deleted**) and click **Delete**.

Changing a user's role

A Catalog Administrator can assign user roles within a catalog.

To change a user's access to catalogs:

1. Click **Catalogs** and select a catalog.
2. Click **Users**.
3. - **To change the user's access for the selected catalog,** choose a new **Role** from the pop-up menu for the user, then click **Change Role** in the confirmation dialog.
   - **To remove the user from the catalog,** choose **None** from the pop-up menu for the user, then click **Remove** in the confirmation dialog.

Portfolio catalogs

In Portfolio, a catalog is a collection of digital assets, typically related either in the simplest sense (they are all of your organization's assets) or based on some organizational principle (they are all the assets used by the News department of the East Coast division).

Portfolio allows you to have multiple catalogs to satisfy your organizational needs. The benefit of dividing assets into catalogs is that you can specify a user's ability to access assets at the catalog level. A user who needs to access News assets may not need to access Reality TV assets; by creating a catalog for each set of assets, you eliminate issues that can arise from too many users having access to assets.

Creating a catalog

To create a Portfolio catalog:

1. Click **Catalogs**.
2. Click **Add** above the list of catalogs.
3. Enter the catalog name.
4. Specify a catalog template.
5. Choose a **Collation** method from the drop-down menu.
   This setting determines how information in your database is sorted.
6. Choose a **Storage Type**.
   For a Vault catalog, you can enable **Asset Versioning**.
   For a Watch Folders catalog, you can create an AutoSync folder that users can access immediately.
7. Click **Create**.

NOTE: When you create a catalog, the Portfolio **administrator** account is automatically added with the role of Catalog Administrator.

Catalog types

Portfolio provides two types of catalogs: the more traditional Watch Folder catalog, in which asset files are stored on your network; and the Vault catalog, in which assets are stored in a location that is managed by Portfolio.

The advantages of the Watch Folder catalog are that it can take advantage of available storage anywhere on your network, and users can add assets to a catalog by adding a file to a "watched" folder. The main disadvantage is that these files are open to access from other users and applications, and could potentially be modified, damaged, or deleted.

The advantage of the Vault catalog is that access to your assets is managed by Portfolio, which allows users to check out assets to modify them, with Portfolio retaining multiple versions of assets so that the risk of loss is greatly reduced. The primary disadvantage is that you need a potentially large amount of storage space on your server for your catalogs. (This disadvantage is mitigated by the fact that server storage is typically faster and more secure than networked storage.)

Catalog templates

Catalog templates make it simple to configure a new catalog for a specific purpose. Portfolio provides four catalog templates. Each template is a starting point from which you can further customize your catalog.

The benefits of choosing the appropriate catalog template can be measured in time. Since Portfolio automatically creates many custom fields for you, the setup time required will be considerably shorter. Also, if you don't need to have a large number of custom fields, accessing and searching a catalog is much quicker.

Regardless of which catalog template you choose at the start, you can add and delete custom fields and update metadata mappings to fit your specific needs.

The default catalog templates are:

- **General Use:** The **General Use** catalog template includes many default custom fields for a wide variety of metadata, including EXIF, IPTC and XMP fields. Use this catalog template if you want to include all of these fields in your catalog, or if you aren't sure what type of media will be in your catalog.
- **Simple:** The **Simple** catalog template does not contain any custom fields, and is not configured to extract metadata from files. The simple catalog template is useful as a starting place for complex catalogs that require specific custom fields and metadata extraction settings that you want to configure manually. This catalog template contains **Keywords** and **Description** fields, and can be configured to extract metadata into these fields. Keywords are automatically generated in the catalog, based on the file's parent folder and filename.
- **Spectrum:** The **Spectrum** template is based on the primary specification for collections management activity in museums. For more information, see Spectrum - Collections Trust.
- **VRA Core:** The **VRA Core** template is based on the data standard for the description of works of visual culture and the images that document them. For details, see VRA Core Support Pages.

TIP: You can also create a custom catalog template containing exactly the fields and metadata mapping that your organization requires. See ***Custom catalog templates*** on page 74.

Catalogs and users

In Portfolio, you must assign a user a role in a catalog in order for that user to access the catalog's assets. You can assign a role manually at any time, automatically when you create a user, or through your network's Active Directory service.

- **To assign a role manually,** see ***Catalog access*** on page 54.
- **To assign a role when you create a user,** see ***Adding user accounts*** on page 31.
- **To assign a role through Active Directory,** see ***Mapping users from Active Directory*** on page 42.

Spectrum - Collections Trust: `https://collectionstrust.org.uk/spectrum/`
VRA Core Support Pages: `https://core.vraweb.org/`

Deleting a catalog

When you no longer need a catalog, you can delete it from Portfolio. Deleting a catalog removes all asset metadata, and should only be done when future user access to assets is not required.

IMPORTANT: When you delete a Vault catalog, all of its assets will be deleted as well. Before deleting a Vault catalog, you can copy the assets to another catalog (which also copies their metadata and versions), or export the assets (see ***Exporting a Vault catalog*** on page 76).

Deleting a Watch Folder catalog does not remove the assets referenced by the catalog.

To delete a catalog:

1. Click **Catalogs** and select a catalog.
2. Click **Remove** above the list of catalogs.
3. Click **OK** in the confirmation dialog.

Advanced configuration

Roles

Users connect to a catalog with one of four roles: Catalog Administrator, Publisher, Editor, or Reader. Each role determines the features and functionality available to the user once they have connected to a catalog. A user may have a different role in each catalog.

- **Catalog Administrator:** The Catalog Administrator role allows a catalog user to perform any action available within Portfolio Web, and can also log in to the Administration application in order to generate reports, manage NetPublish sites, and modify the catalog, including defining custom fields, master keywords, and Watch Folders, and configure all catalog-specific settings. For an overview of what a Catalog Administrator can do, see ***Catalog administration tasks*** on page 53.
- **Publisher:** The Publisher role is primarily used to let a user add and delete catalog entries. While this user can also enter data, they are limited in that they cannot alter or define fields, including the Master Keyword list.
- **Editor:** The Editor role is primarily for users that need to perform data-entry tasks. It is different from Publisher mainly in that it does not allow users to add or delete assets.
- **Reader:** A Reader in a catalog may search and perform some other basic tasks, but is limited in that users with this role may not add or delete assets, or edit fields within the catalog.

Roles and clients

The following operations are available to Portfolio Web and Desktop client users and can be enabled or disabled in the **Roles** page of the Administration application:

- **Access and Process Originals:** Allows the user to download original files. When this permission and **Use Convert Presets** are enabled, the user has access to the **Batch Process** function.
- **Add Assets:** Allows users to add assets to a catalog.
- **Can Smart Keyword:** Allows the user to use the **Suggest Smart Keyword** feature for cataloged assets.
- **Check Out Assets:** For Vault catalogs, allow the user to check out an asset.
- **Delete Asset from Catalog:** Allows users to remove assets from a catalog.
  - Regardless of this setting, users will always be allowed to remove assets from a gallery.
  - In a Vault catalog, this permission also allows users to delete assets from the Vault, without the need to have the **Delete Original Assets** permission.
- **Delete Original Assets:** Allows users to remove files from disk when removing assets from a Watch Folder catalog. (Users must also have the **Delete Asset from Catalog** permission in order to delete original assets.)
- **Embed Metadata:** Allows users to edit metadata that can be embedded in a file.
- **Import/Export Metadata:** Allows users to export metadata for assets to a text file, or import metadata for existing cataloged assets from a text file (either from another Portfolio catalog or from a different system).
- **Make PDF:** Allows the user to generate a PDF contact sheet.
- **Manage Presets (Convert and Make PDF):** Allows users to create, edit, and delete Batch Process and PDF presets. (In order to manage Batch Process presets, users must also have permission to **Access and Process Originals** and **Use Convert Presets**. In order to manage PDF presets, users must have the **Make PDF** permission.)
- **Manage Public Field Lists:** Allows users to add, remove, and edit field list presets.
- **Manage Public Galleries:** Allow users to create, update, and delete public galleries.

- **Modify Folder Structures:** Allows users to add and remove subfolders. In order to move subfolders, users must have the **Move Assets** permission.
- **Move Assets:** Allows users to move assets between folders.
- **Publish NetPublish Sites:** Allows the user to publish and modify NetPublish sites.
- **Sync AutoSync Folders:** Allows users to manually synchronize a watch folder.
- **Update Asset Fields:** Allows users to edit metadata for an asset. Users must also have the **Embed Metadata** permission.
- **Use Convert Presets:** Allows users to use custom conversion presets created by others. When this permission and **Access and Process Originals** are enabled, the user has access to the **Batch Process** function.

Each role has some enabled permissions, some permissions that can be enabled, and some that cannot be enabled. Permissions that cannot be changed for a specific role are dimmed.

For example: Users with the Publisher role initially cannot manage presets, but this capability can be enabled for all Publisher users. By contrast, Catalog Administrators always have this capability, but Reader and Editor users can't be allowed to manage presets.

Configuring roles

To configure options for each user role:

1. Click **Roles** and select a role.
2. Enable or disable options.

Changes are saved automatically.

Custom roles

If the built-in roles do not meet your needs, you can create custom roles with exactly the permissions that you want to allow.

To create a new role, click **Add** at the top of the **Roles** panel, enter the new role's name, then click **Save**.

Check the box next to each permission that you want to allow for the new role.

> **NOTE:** It is up to you to make sure your custom role has appropriate and logical permissions.

To edit a custom role, highlight it in the list, then select or deselect permissions.

To remove a custom role, highlight it in the list and click **Remove**, then click **OK** in the confirmation dialog.

> **NOTE:** When you remove a custom role, any user that had that role assigned will be assigned the Reader role.

Server data locations

Portfolio needs several locations to use for permanent and transient storage. To see and change these locations, click **Global Settings**, then click **Server Data Locations**.

> **IMPORTANT**
> It is a good idea to modify these settings before you create any catalogs; this can save you significant time (and Portfolio down time) if you need to change any of these locations later.
> For some suggestions on how to configure your Portfolio system, see ***System recommendations*** on page 15.

AutoSync folders

The **AutoSync folders** location is used for new Watch Folder catalogs. If the **Create AutoSync folders** setting is enabled, then Portfolio will automatically create an AutoSync folder in the specified location when you create a new Watch Folder catalog. This is useful because catalog users can immediately start adding assets.

The AutoSync folder is given the same name as your catalog with the word "Files" appended; if your catalog is named "Big Client" then the AutoSync folder will be named "Big Client Files".

The settings used for the default AutoSync folder are:

- Synchronize assets when changes are found;
- Do not remove missing assets from Catalog.

These settings cannot be modified.

To change the default location where AutoSync folders are created, click **Change**, then browse to the desired location and click **Select**. The folder that you select must be read/write accessible to the Portfolio server. Be sure it is on a drive with plenty of space.

If **Create AutoSync folders** is not enabled, you can still create an AutoSync folder when you create a new Watch Folder catalog. In the **Create Catalog** dialog, enter the catalog name, select **Watch Folders**, then check the box labeled **Create an AutoSync folder**.

IMPORTANT: If you do not create an AutoSync folder with your Watch Folders catalog, a Catalog Administrator will need to create a Watch Folder from the Portfolio Web or Desktop client. See ***Adding Watch Folders*** on page 75 for details.

Previews folder

Portfolio creates preview images (or clips for media files) when an asset is cataloged, and stores those previews in a specific folder for each catalog. Portfolio will automatically create a Previews folder in the specified location when you create a new catalog.

The Previews folder is given the same name as your catalog with "_previews" appended; if your catalog is named "Big Photos" then the Previews folder will be named "Big Photos_previews".

To change the default location where the Previews folder is created, click **Change**, then browse to the desired location and click **Select**. The folder that you select must be read/write accessible to the Portfolio server. Preview files for a catalog can consume a lot of space; make sure the chosen location has plenty of available space.

A Catalog Administrator can change the specifications of preview files as well as the location of the Previews folder for a specific catalog. See ***Previews*** on page 68 for details.

Temporary Work folder

When cataloging and converting assets, Portfolio requires some temporary work space. This space is used for, among other things, holding user conversion jobs until they can be downloaded. Such jobs can require a lot of space, albeit temporarily.

By default, Portfolio locates its work folder on the same drive that it is installed on (typically, the boot drive of the Portfolio server system).

If you don't want your boot drive to be subject to a lot of read/write activity, or if you anticipate users creating very large conversions (especially GIS or video conversions), you may wish to specify a different location for Portfolio to use for its work files.

To change the location of the Temporary Work folder:

1. Click **Status**, then click **Stop Portfolio**.
2. Click **Global Settings**, then click **Server Data Locations**.
3. Click **Change** next to **Temporary Work folder**.
4. Browse to the desired work folder, then click **Select**.
   The folder that you select must be read/write accessible to the Portfolio server.
5. Click **Status**, then click **Start Portfolio**.

Portfolio Vault folder

The Vault is a customized high-performance structure where all your Vault catalogs and their associated asset files are stored.

In order to change the Vault location, you need to stop the Portfolio server first.

> **IMPORTANT:** If you already have existing Vault catalogs, you will need to move this data to the new location before you re-start Portfolio. See ***Moving an existing Vault*** on page 51.

To change the Vault location:

1. Click **Status**, then click **Stop Portfolio**.
2. Click **Global Settings**, then click **Server Data Locations**.
3. Click **Change** next to **Portfolio Vault folder**.
4. Browse to the desired Vault folder, then click **Select**.
   The folder that you select must be read/write accessible to the Portfolio server.
5. Click **Status**, then click **Start Portfolio**.

Logs folder

Portfolio logs its performance and error information.

To change the location of common log files:

1. Click **Status**, then click **Stop Portfolio**.
2. Click **Global Settings**, then click **Server Data Locations**.
3. Click **Change** next to **Logs folder**.
4. Browse to the desired Logs folder, then click **Select**.
   The folder that you select must be read/write accessible to the Portfolio server.
5. Click **Status**, then click **Start Portfolio**.

For more information about log file configuration and content, see ***Portfolio logs*** on page 44.

Configuring Active Directory

To bind to a directory service:

1. Click **Directory Services**.
2. In the **Active Directory Configuration** panel, enter the connection settings of your directory service.
   - **Hostname:** The IP address or DNS name of your directory service.
   - **Port:** Enter the LDAP connection port (the default port is 389).
   - If SSL is required, select the **Use SSL** option and update the port accordingly (the default port for LDAP using SSL is 636).
   - **LDAP Bind Username:** Enter a username that has permission to query the directory service. Enter the username as one of the following:
     - domain\user. Example: `mycompany\jsmith`
     - user@realm. Example: `jsmith@mycompany.com`
     - The fully qualified LDAP distinguished name (DN). Example: `cn=jsmith,cn=users,dc=MYCOMPANY,dc=COM`
   - **Password:** The password for the LDAP Bind Username.
   - **Synchronize Daily:** Select this option to have Portfolio automatically synchronize mappings with the LDAP server once a day. If you do not enable this option, synchronization is only performed manually.
     User authentication is performed each time a user logs in, so synchronization is not necessary for Portfolio accounts that are created for LDAP users.
3. Click **Apply** to bind your directory service to Portfolio.

After successfully binding to the LDAP service, you can map users and groups to specific catalogs; see ***Mapping users from Active Directory*** on the next page.

Synchronizing Portfolio with the directory service

If you are mapping directory service accounts to Portfolio catalogs, you need to periodically synchronize Portfolio with the directory service.

If you want to apply new or changed mappings, or import directory service changes to Portfolio immediately, you can synchronize Portfolio with the directory service manually.

To manually synchronize with the directory service:

1. Click **Directory Services**.
2. At the bottom of the **Active Directory Configuration** panel, click **Synchronize Now**.

You can also have Portfolio synchronize with the directory service once a day, automatically.

To change the directory service synchronization settings:

1. Click **Directory Services**.
2. Select (or de-select) the **Synchronize Daily** option in the **Active Directory Configuration** panel.
3. Click **Apply** to save the new setting.

Removing a directory service configuration

You may want to remove a directory service configuration. As a convenience, when you disconnect Portfolio from a directory service, users who were added via the service are automatically converted into native Portfolio users with a password identical to their username.

> **NOTE:** You should change these user passwords as soon as possible.

To remove a directory service configuration:

1. Click **Directory Services**.
2. In the **Active Directory Configuration** panel, click **Remove Service**.
3. In the confirmation dialog, click **OK**.

Mapping users from Active Directory

> **NOTE:** Before you can add directory service accounts to Portfolio, you will need to bind Portfolio to an Active Directory service. See ***Configuring Active Directory*** on the previous page.

You can map any combination of users and groups from an Active Directory service to a Portfolio catalog. Once you save a mapping, you can edit it to add more users or groups, remove users or groups, or exclude specific users from a catalog.

To edit your directory service mappings, click **Directory Services** on the left, then click **Mappings** at the top of the **Directory Services** panel.

The **Portfolio Mappings** dialog consists of two parts: the Service Browser on the left, which lists users and groups, and the Mappings on the right, which lists the users mapped to a catalog.

Service browser

In the service browser, you query the directory service for existing users and groups.

The **AD Users and Groups** list shows the users and groups that match the query criteria.

Use the query **Filter** to restrict the listing to certain users or groups within the directory service.

The available filters are:

- **Security Groups:** Displays all security groups within the directory service.
- **Distribution Groups:** Displays all distribution groups within the directory service.
- **Users:** This filter displays all the directory service users in a flat (non-hierarchical) list.
- **Entire Tree:** Displays the highest level of the directory service tree. Use this if you want to browse to a specific entry manually.
- **Name:** Use this filter to locate users by name. This filter includes the options to search if a name equals, contains, or starts with the entered text.

Creating a mapping

Directory service mapping is a simple, flexible, and powerful way to give users on your network access to Portfolio catalogs. It is important to understand how account mapping works, in order to maintain a secure and steady workflow for your Portfolio users.

To create a directory service mapping:

1. Choose the catalog to map to from the **Catalog** pop-up menu in the **Mapping** panel on the right. If you have created a mapping for that catalog already, it will be displayed, and you can proceed to modify it.
   There are three types of mapping targets that you can choose from:
   - **Specific catalog:** This is ideal for complex user and group mappings
   - **All Catalogs:** Useful if you need to map users to many catalogs.
   - **None:** This allows you to import directory service users, automatically creating Portfolio accounts for them, which you can manually assign to catalogs.
2. Select entries in the service browser on the left.
   You can select any combination of users and groups.
3. Click **Create Mapping** at the bottom of the service browser.
4. To exclude individual users from a mapping, select the users in the service browser, then click **Exclude User**.
5. You can choose a specific role for each user from the drop-down menu next to the user's entry in the **Mapping** panel.
6. Click **Save and Sync**. This will cause Portfolio to synchronize to the directory service, and add the specified users to the selected catalog.

Automatic synchronization and group updates

The major benefit of mapping a group instead of the individual members in that group is that all future members added to that group will become members of the same catalog, and their network logins will immediately work to give them access to the catalog.

Click **Exclude User** to deny catalog access to individual users, even if they are part of a group that has access.

Editing an existing mapping

You can edit a mapping that you saved; click **Directory Services**, click **Mappings**, then choose the desired catalog from the **Catalog** pop-up menu in the right-hand panel.

You can use the service browser to filter users and groups at any time while editing your map.

To remove a user or group from an existing mapping, choose the user or group name in the right-hand panel, then click **Remove Mapping**.

To add new users or groups to a mapping, select one or more users or groups (or both) in the service browser on the left, then click **Create Mapping** .

To exclude a user from accessing a Portfolio catalog, select the user in the service browser and click **Exclude User**. The user will be added to the mapping with this icon ⛔ to indicate that user is specifically excluded regardless of group membership.

To cancel any changes without saving them, click **Revert Changes**.

To save your mapping changes, click **Save and Sync**.

Importing user accounts from a directory service

You can use a directory service mapping to create user accounts, and then later assign those accounts to catalogs.

1. Bind Portfolio to your directory service. See ***Configuring Active Directory*** on page 41.
2. Click **Mappings**.
3. Choose one or more groups or users.
4. Choose **None** from the **Catalog** pop-up menu on the right.
5. Click **Create Mapping**.
6. Repeat steps 3–5 as necessary, then click **Save and Sync**.

Portfolio logs

Portfolio logs its performance and error information to assist in support and troubleshooting.

Some log files can grow very large, so you may wish to move them from their default location. To change where log files are saved, see ***Logs folder*** on page 40.

Extensis Support may ask you to send these log files; to do so, click **Status**, then click **Send Diagnostic Report to Extensis** (located in the **Diagnostics** panel of the **Status** page).

Extensis Support may ask you to change the amount of diagnostic information that is written to log files. To do this:

1. Click **Global Settings**, then click **Logging Configuration**.
2. Choose the desired level of information to log from the **Log level** pop-up menu:
   Error: Logs only error messages.
   Info: Logs errors and information about certain other events.
   Debug: Logs errors and all events.

> **TIP:** The **Debug** level can result in very large log files. You should only use the **Debug** level if instructed to do so by Extensis Support.

Portfolio will also keep a rolling record of log files (saving log files a specified number of days). You may wish to change this to save space, or you may be asked to change this by Extensis Support so they can gather a longer history.

To change the number of historical log files saved:

1. Click **Global Settings**, then click **Logging Configuration**.
2. Select the number of log files that you want to keep from the **Number of logs to retain** pop-up menu.

At midnight of each day, Portfolio closes the day's log files, appends the previous day's date to the filename, then starts a new log file.

Portfolio Web login customization

You can modify the login page of Portfolio Web to incorporate your own image, an optional link, and a custom background color.

1. Click **Global Settings**, then click **Web Client Customization**.
2. Select **Customized Login Screen**.
3. To add a custom image to the top left of the login screen, click **Choose File** and select the image.
4. To have the image link to a website when clicked, enter the URL to link to.
5. Enter the title to be displayed in the browser's title bar or tab.
6. Click the color swatch to choose a background color for the login window.
   Other colors in the window will be automatically adjusted to complement the background.
7. Click **Apply** to save the changes.

Mobile uploading

Portfolio includes the ability to upload assets from iOS and Android™ mobile devices.

Click **Global Settings** then click **Mobile** to configure uploading.

Select **Enable Mobile Uploading** to allow mobile users to upload assets to Portfolio.

In order for your users to use the mobile upload feature, they need to install the Portfolio Flow™ app on their iOS or Android device, available from the App Store™ or Google Play™ store.

To disable uploading, deselect the option. This will not affect any assets that have already been uploaded.

Uploaded assets are saved in a folder that you specify. Portfolio needs to have read/write access to this folder.

The Mobile Uploads folder

To change the Mobile Uploads folder:

1. Click **Global Settings**, then click **Mobile**.
2. Click **Change**.
3. Browse to the desired folder, then click **Select**.
   Select a folder on a drive with enough free space to accommodate the upload activity that you expect.
   The folder that you select must be read/write accessible to the Portfolio server.

The Mobile Uploads catalog

Portfolio can create a catalog named **Mobile Uploads** that "watches" the upload folder. New uploads will automatically be added to this catalog.

The Catalog Administrator for the **Mobile Uploads** catalog can assign users to the catalog in the usual way. See ***Catalog access*** on page 54.

Configuring Single Sign-on

Single Sign-on allows Portfolio Web users to be automatically connected to Portfolio without needing to log on. Their network credentials are used to connect them to their Portfolio catalogs.

For more information, see the Knowledge Base Article Setting up Single Sign-On for Portfolio 3.x.

Setting up Single Sign-On for Portfolio 3.x: `https://help.extensis.com/hc/en-us/articles/360036865553`

Single Sign-on requirements

In order to successfully use Single-Sign on with Portfolio, you need the following:

- A license for the Portfolio Single Sign-on add-on;
- Portfolio running on a Windows Server in an Active Directory environment that supports Kerberos 5 as an AD user;
- A Service Principal Name (SPN) that has been configured for Portfolio and for a domain account (the SPN account does not need to be the same account that Portfolio runs under);
- Domain user accounts imported into Portfolio;
- Mac client systems must be joined to the Windows domain.

To enter Single Sign-on credentials:

1. Click **Global Settings**, then click **Single Sign-on Credentials**.
2. Enter the **Account** and **Password** for the Service Principal Name.
3. Click **Apply**.

Email notifications

Portfolio can send email notifications to users and administrators for certain activities and conditions.

> **NOTE:** Features that support email notification do not check whether a user account has an email address assigned; you must assign these in the **Users** workspace. Accounts created using a directory service will use the email address associated with the DS account.

To configure Portfolio to send email notifications:

1. Click **Global Settings**, then click **Email Notifications**.
2. Check **Enable Email Notifications**.
3. Enter the address and port for your SMTP (outgoing) mail server.
4. If your mail server requires a secure connection, select the **Use SSL/TLS** checkbox.
5. If your mail server requires authentication, select **Use SMTP Authentication** and enter your email address and password.
   Typically, we would suggest that you use the email address of the Portfolio Administrator account, but your IT department may suggest a different set of credentials.
6. To confirm that your credentials work, click **Test Connection**.
7. In the **Email From Address** field, enter the email address that you want emails to appear to be from. This is typically the address that you want users to be able to reply to; if you don't want replies, you could enter your organization's "no reply" address or a non-existent address in your organization's domain. (Be careful to not use an email address from another domain or one that might eventually be used in your organization's domain.)
8. Click **Apply** to save your changes.

Adding SSL for secure connections

By default, Portfolio uses a self-signed certificate for secure client connections. You can request and add a signed certificate in Portfolio Administration, without resorting to the command line.

This certificate allows secure (i.e., https) connections from Portfolio Web, Desktop, and NetPublish users.

TIP:
With an SSL certificate installed, visitors can access NetPublish sites using either the HTTP or HTTPS protocol.

When a user publishes a site, Portfolio returns the non-secure (HTTP) URL for the site; to connect using a secure connection, visitors can use the same URL, with the HTTPS protocol and port 8095.

Example:

Published site: `http://1.2.3.4:8085/mysite`

Secure site: `https://1.2.3.4:8095/mysite`

Be sure to let Portfolio users that may publish NetPublish sites know if you have installed an SSL certificate.

Certificate Status

In Portfolio Administration, click **SSL Certificate**. This shows the certificate status. Initially this will be invalid because the certificate is self-signed.

You can replace the self-signed certificate with one provided by a certificate authority such as DigiCert, GlobalSign, or CAcert.org. Your IT department may also be able to provide you with a certificate.

Certificate Request

The process of getting a certificate involves creating a request file, sending the request to a Certificate Authority, receiving a certificate file in return, then importing the certificate file.

To create the request file:

1. Click **Global Settings**, then click **SSL Certificate**.
2. Click **Create Certificate Request**.
3. Fill in the basic information:
   - **Fully Qualified Domain Name:** For the Portfolio server system (such as `portfolio.example.com`)
   - **Organization Name:** The name of your organization. This may be displayed on the server, but does not need to be a legal entity ("ExampleCorp" is OK, you don't need to use "Example Corporation LLC").
   - **Organizational Unit:** The name of the group within your organization responsible for the Portfolio server. This could be the same as the Organization Name.
   - **City or Locality**
   - **State or Province**
   - **Two-letter Country Code**
   - **Subject Alternative Names:** List here any additional hosts that you want to be covered by the same certificate. If you have multiple servers (Portfolio or any other web server), you can add their names here. You can also add different ways to address one server (IP address, DNS name, or LDAP Distinguished Name [dn] or Common Name [cn]). Separate individual entries with commas.
4. Click **Create**. This will generate a `.CSR` file; when prompted to download the file, click **OK**. You can download the file at any time; click **Download** in the **Certificate Status** panel.

Overriding an outstanding request

If you need to use a certificate other than the one requested, you can generate a new request, which will override the previous request; or you can click **Delete** in the **Certificate Status** panel to delete the outstanding request.

Importing your certificate

The Certificate Authority will return a certificate file to you that you can import into Portfolio.

To import the certificate file:

1. Click **Global Settings**, then click **SSL Certificate**.
2. Click **Import Certificate**.
3. Click **Select** and select your certificate file, then click **Import**.

When the import is complete, the **Certificate Status** page will update to show the new certificate.

> **NOTE:** This method of importing a certificate relies on the certificate request; you will not be able to import a certificate that does not match an outstanding certificate request.

Replacing an existing certificate

To replace a certificate, generate a new request and import the new certificate.

You will need to do this when your existing certificate expires.

Ports

Portfolio requires a number of ports on your server for client connections and server administration.

The ports used by Portfolio must not conflict with other applications on the server. Typically, you will not need to change these port settings.

External ports must be opened in the host system's firewall and operating system. The process of opening ports varies by operating system. Please refer to your operating system and firewall documentation for more information.

Port	Default	Purpose
Portfolio Server HTTP Port	8090	External communication with Portfolio Web and Desktop clients
Portfolio Server SSL Port	9443	Secure external communication with Portfolio Web and Desktop clients
Portfolio Admin HTTP Port	8091	External communication with Portfolio Administration
Portfolio Admin SSL Port	9453	Secure external communication with Portfolio Administration

Portfolio Server ports

Portfolio Web and Desktop client users can utilize the default client port (8090), or if enabled using a custom security certificate, the SSL encrypted port (9443). The encrypted port has slightly degraded performance due to the encryption between Portfolio clients and the Portfolio server. You may want to direct users to connect using the standard Web client port while working on your internal network behind a firewall, and only allow SSL client connections from outside your network.

IMPORTANT: SSL client connections require the use of a custom security certificate. Using the default self-signed certificate is not supported for Portfolio client connections.

Provide your Portfolio users the following information to log on to the server:

- The server IP address or DNS name.
- The client port number. The default client port value is 8090. If enabled with a custom security certificate, the secure (SSL) client port default value is 9443.
- Their Portfolio username and password.

Portfolio Admin ports

The server administrator connects to Portfolio Administration using either the default HTTP (8091) or HTTPS (9453) ports.

In order to log in to the Administration application, you need:

- The server IP address or DNS name.
- The Administration port number. Use the Administration port (default value 8091) or the secure (SSL) Administration port (default value 9453).
- The Portfolio Administrator account password, or a Catalog Administrator account name and password.
  NOTE: Portfolio Administration does not accept Directory Service-authenticated logins. In order for a Catalog Administrator to use Portfolio Administration, they must have a native Portfolio account.

Resolving port conflicts

The Portfolio installer checks to see if the **Portfolio Admin HTTP Port** (8091) is bound to any other application. If it is already taken, then another available port is chosen before the Administration application starts.

After installation, verify that the Administration application opened using the default port 8091. If a different port is used, it is possible that you have port conflicts. The installer registers any port conflicts in the `extensis.admin.log` file.

Portfolio uses standard JBoss and Tomcat ports, so if your server has other applications that are built using these technologies, you may need to change Portfolio's port numbers.

To update port numbers used by Portfolio:

1. Click **Global Settings**, then click **Ports**.
2. For each port that requires a new port number, click **Change**, enter a new port number, then click **Save**.
3. Click **Restart Portfolio** at the bottom of the **Ports** page.

Changing the default CMYK profile

When Portfolio converts an image to CMYK, it uses the CMYK color profile specified in the file `ICCProfilePreferences.properties`. This file can be found here:

Windows: `C:\Program Files\Extensis\Portfolio Server\applications\media-engine\bin`
Mac: `/Applications/Extensis/Portfolio Server/applications/media-engine/Bin`

Portfolio includes two CMYK color profiles:

- `USWebCoatedSWOP.icc`
- `ISOcoated_v2_eci.icc`

The default profile used for CMYK conversion is `USWebCoatedSWOP.icc`.

To change the profile:

1. Open the file `ICCProfilePreferences.properties` in a text editor (Notepad on Windows or TextEdit on macOS).
2. Change the line that reads
   `cmyk=USWebCoatedSWOP.icc`
   to
   `cmyk=ISOcoated_v2_eci.icc`
3. Save and close the file.

If you are using external Media Engines, you will need to make the same change on each system.

When you have changed the file on your Portfolio and all Media Engine systems, restart the Portfolio Media Delegate service, using the steps specified within the `ICCProfilePreferences.properties` file.

Converting a Watch Folder catalog to a Vault catalog

Portfolio offers two types of catalogs: Watch Folder catalogs and Vault catalogs.

Vault catalogs offers a number of advantages over Watch Folder catalogs, including the ability to check assets in and out, and maintaining versions of assets.

While there is no way to directly convert catalogs, this process describes copying the contents of a Watch Folder catalog to a Vault catalog.

IMPORTANT: If you have modified the fields or metadata mapping of your Watch Folder catalog, you should save the catalog as a custom template to use with your Vault catalog. See ***Custom catalog templates*** on page 74.

To copy a Watch Folder catalog to a Vault catalog:

1. Create a new Vault catalog using the same template as the Watch Folder catalog.
2. Use the Portfolio Web or Desktop client to copy assets from the old Watch Folder catalog to the new Vault catalog.
   a. Right-click the **All Assets** organizer and choose **Copy/Move Contents** from the shortcut menu.
   b. In the **Copy/Move** dialog, select **Copy**, select your Vault catalog as the **Destination Catalog**, select the **Destination Folder**, then click **Copy**.
   c. Click **OK** in the confirmation dialog.

If your original catalog had galleries, you will need to re-create them in the new catalog. You will also need to assign users with the desired roles to the new catalog.

When you are sure that your Vault catalog is complete and works as expected, you can delete the original Watch Folder catalog.

NOTE: This process can be completed by a Catalog Administrator who has access to both the Watch Folder and Vault catalogs. The destination Vault catalog needs to be created by the Portfolio Administrator, and the original Watch Folder catalog can only be deleted by the Portfolio Administrator.

Moving an existing Vault

If you have already created a Vault catalog but want to relocate the Portfolio Vault, you can move the existing Vault folder:

1. Click **Status**, then click **Stop Portfolio**.
2. Click **Global Settings**, then click **Server Data Locations**. Make a note of the **Portfolio Vault folder** location.
3. In Windows Explorer or the macOS Finder, copy the Vault folder to the new location.
   The Vault folder must be on a local drive and must be read/write accessible to the Portfolio server.
   TIP: If at all possible, keep the Vault on an internal drive. If that isn't possible, we suggest a locally connected, large, fast hard drive or RAID array.
4. Click **Change** next to **Portfolio Vault folder**.
5. Browse to the desired Vault folder, then click **Select**.
6. Click **Status**, then click **Start Portfolio**.

The Portfolio API

The Portfolio API provides a common interface for developers to integrate Portfolio catalogs, asset metadata, and media processing into business systems, custom workflows, and web infrastructures.

By using a single, well-supported programming interface, developers can rest assured that their solutions will have optimum compatibility with future Portfolio versions.

You can use the Portfolio API to create a custom front end to a Portfolio catalog, or to integrate Portfolio's capabilities into a larger workflow solution. Examples include:

- A simple widget for users to find and download images;
- Direct access to Portfolio catalog metadata from a separate business application;
- A website that allows uploading of single or bulk assets and entry of metadata.

Where to go for more information

Documentation for the Portfolio REST API is available online: Portfolio REST API Reference.

Documentation for the deprecated SOAP API is available online: Portfolio SOAP API Documentation.

For API support, please submit a support request using this Support Form.

Portfolio REST API Reference: `http://doc.extensis.com/api/portfolio/rest/index.html`
Portfolio SOAP API Documentation: `http://doc.extensis.com/api/portfolio/index.html`
Support Form: `https://help.extensis.com/hc/en-us/requests/new/`

Catalog administration tasks

The Catalog Administrator is responsible for performing the following catalog-related tasks:

- **Renaming the catalog**
  If you need (or want) to rename a catalog, you can!
  See ***Renaming a catalog*** on page 54
- **Assigning roles to catalog users**
  Give users access to catalogs based on the tasks they need to accomplish.
  See ***Catalog access*** on page 54
- **Modifying the fields used in a catalog**
  If you need to add more data to a catalog, or adjust the content of existing fields.
  See ***Catalog fields*** on page 55
- **Creating custom catalog fields**
  If there is specific data that isn't accommodated by pre-defined fields, you can define your own.
  See ***Creating custom fields*** on page 59
- **Creating custom metadata**
  Metadata can be written out to asset files. If you have custom data that you want to export to assets, you can create custom metadata definition.
  See ***Custom metadata*** on page 61
- **Creating custom XMP namespaces**
  To extend your custom metadata, you can add a custom namespace.
  See ***Custom XMP namespaces*** on page 63
- **Configuring settings for adding assets**
  Portfolio can automatically add keywords, prompt users for metadata, and filter files that can be added to a catalog. See ***Ingest settings*** on page 65
- **Configuring Smart Keyword settings**
  Smart Keywords are keywords determined by examining the visible content of an image. You can specify categories to include, and languages for returned keywords.
  See ***Smart Keywords*** on page 70
- **Generating reports**
  Portfolio provides multiple reports on asset usage and NetPublish sites.
  See ***Reports*** on page 71
- **Manage NetPublish sites**
  You can enable or disable NetPublish sites and, in the Portfolio Web and Desktop clients, edit other aspects of your existing sites.
  See ***Portfolio NetPublish sites*** on page 73
- **Create catalog templates**
  If your catalogs require different fields than the standard templates, you can create your own.
  See ***Custom catalog templates*** on page 74
- **Add Watch Folders**
  Watch Folder catalogs monitor folders on your network for changes, and update your assets accordingly.
  See ***Adding Watch Folders*** on page 75
- **Export assets and metadata from a Vault catalog**
  Vault catalogs are inaccessible to casual file browsing. This helps you archive a Vault catalog's contents.
  See ***Exporting a Vault catalog*** on page 76

Administering catalogs

Renaming a catalog

If you decide you need to rename a catalog:

1. Click **Catalogs**, then select a catalog.
2. Type the new name for the catalog.
3. Click **Apply**.

Users that are connected using the Web or Desktop client may not see the change until they log out and reconnect.

Catalog access

In order for a user to access assets in a catalog, they must have two things: a Portfolio account (either native or through a directory service), and an assigned role in the catalog.

The Portfolio Administrator manages Portfolio accounts and directory service access.

- **For information on creating native user accounts,** see ***Adding user accounts*** on page 31. The Portfolio Administrator can also assign a role to a new account, so the user is automatically assigned to every catalog.
- **For information on configuring a directory service,** see ***Configuring Active Directory*** on page 41.
- **For information on mapping LDAP user and group accounts to Portfolio catalogs,** see ***Mapping users from Active Directory*** on page 42.

Assigning a role manually

To assign a user a role in a catalog:

1. Click **Catalogs** and select a catalog.
2. Click **Users**.
3. In the user's row, choose a role from the pop-up menu.

To remove a user from a catalog, choose **None** from the pop-up **Role** menu.

Catalog fields

The Catalog Administrator determines what metadata fields are available in a catalog.

This allows you to tailor a catalog to include only relevant metadata, reducing the size of the database and making searching and other operations more efficient and faster.

> **NOTE:** For information about adding custom fields to your catalog, see ***Creating custom fields*** on page 59.

To change which fields are included in a catalog:

1. Click **Catalogs** and select a catalog.
2. Click **Fields**.
3. For each category:
   a. Choose a field category from the pop-up list.
   b. Select or deselect the checkbox for a field to enable or disable that field in the catalog. (When you disable a field, you'll be prompted to confirm that you want to disable it.)
   NOTE: Some fields cannot be disabled.
   c. For fields that you have enabled, you can edit field details, default, and predefined values, and specify extract and embedding behavior. See ***Extracting and embedding options*** on the next page for details.

Field categories

- **All Active Fields:** This category shows which fields are enabled in your catalog. You can edit field definitions, but you cannot enable or disable fields in this category.
- **Custom Fields:** You can create custom fields for your catalog to store any type of information you want about the assets you catalog: a date, a number, a block of text, or an URL, for example. This gives you more flexibility when it comes to organizing, categorizing, and searching for your assets.
- **System Fields:** System Fields are those that Portfolio includes in all catalogs automatically. They are considered "must-have" metadata for most types of catalogs.
- **EXIF:** EXIF data typically includes information about the device capturing an image, such as model and serial number.
- **IPTC:** Typically, photo and media metadata used by news organizations.
- **Movie:** Metadata included in a variety of video and animation files.
- **MS Office:** Metadata incorporated into Microsoft Office documents.
- **GEO:** Geographic metadata included in GIS files (such as MrSID files).
- **Extensis Font Sense:** Metadata that uniquely identifies a font used in a document; Font Sense metadata is created by Extensis plug-ins for Adobe Illustrator, InDesign, Photoshop, and After Effects.
  Font Sense plug-ins are included with Suitcase Fusion and Universal Type Server's client applications.
- **XMP:** A large selection of general metadata that can be extended as necessary.

Modifying field settings

Most fields have some settings you can customize for your catalog to ensure the data entered is in the format you need.

For all fields, you can:

- Enter a default value for the field;
- Choose to **Allow Multiple Values**;
- Choose to include a list of **Predefined Values** for the field;
- Choose to **Allow Only Predefined Values** in order to restrict user choices to specific values;
- Specify metadata extracting and embedding options. See ***Extracting and embedding options*** below for details.

For String fields, you can set the maximum number of characters allowed in the field.

For Decimal fields, you can set the precision (number of digits after the decimal).

For Date/Time fields, you can choose whether to show the time data when the field is displayed in Portfolio Web or Express.

> **NOTE:** Date/Time fields always include time information, whether it is displayed or not.

The **Keywords** system field includes a unique hierarchical list of predefined values. See ***The Keywords field*** on the next page for details on changing keyword entry options.

Extracting and embedding options

Metadata in the Portfolio catalog can be populated by extracting it from one or more elements of metadata already in the asset's file. In addition, metadata in the Portfolio catalog can be embedded in an asset file when it is downloaded or exported.

> **NOTES**
>
> - You do not need to extract metadata from a file in order to embed it back into a file. In fact, you can add new metadata for a file by adding it within Portfolio then exporting the asset.
> - If you extract metadata from a file but do not elect to embed it back into the asset, that field will be read-only within Portfolio.

To extract metadata into a field in your Portfolio catalog:

1. Click **Catalogs**, select a catalog, then click **Fields**.
2. Select a **Field Category** from the drop-down list, then select a field.
   If the field is not enabled, select the checkbox to the left of the field name to enable it.
   You can also create a custom field; see ***Creating custom fields*** on page 59.
3. Click **Add Extract Metadata**, choose the metadata to extract and click **Add**.
   You can extract up to five metadata elements.
   To remove a metadata element from the list, click **Remove** next to the metadata name.

To save your field settings, click **Submit**.

To embed Portfolio metadata into an asset file, choose a field from the **Embed in Metadata** pop-up menu. The target field does not have to be one of the fields that is extracted.

> **NOTE:** A warning message will be displayed if the chosen field is already the target for other embedded metadata.

To stop embedding metadata from the selected field, select a different field or the – (**None**) option at the top of the pop-up menu.

The Keywords field

NOTE: Keywords can also be added automatically based on a file's name and path. See ***Cataloging Options*** on page 66 for more information.

To specify how keywords are handled while cataloging and exporting:

1. Click **Catalogs** and choose a catalog.
2. Click **Fields**.
3. Choose **System Fields** from the pop-up menu.
4. Click **Keywords** in the list of available fields.
5. Set keyword options.

Changes to keyword options are saved automatically.

Keyword options

Each asset can be tagged with multiple keywords, and each catalog can include its own pre-defined list of keywords that users can choose from to quickly add keywords to assets.

- **Default value:** This is a word or phrase that will be included as a keyword for every file that is added to the catalog. As with all keywords, this can be removed from individual assets within a catalog.
- **Allow Multiple Values:** This is always enabled for keywords. (You will not be able to restrict assets to having just one keyword each.)
- **Has Predefined Values:** Enable this option to create a list of "approved" keywords that users can choose from when adding keywords to assets.
- **Allow Only Predefined Values:** Enable this option to present the list of **Predefined Values** as the only keywords users can search on or add to assets.
- **Predefined Values:** This is a listing of hierarchical or "nested" keywords: you can organize the predefined keywords in a hierarchy, making it easier for users to find appropriate keywords.
- **Extract and Embed Metadata:** Enable this option to extract keywords from the listed metadata fields while cataloging files, and to embed keywords in the indicated metadata field when exporting or converting files.

Working with the Predefined Values list

The **Predefined Values** list allows you to specify a list of keywords for users to choose from for tagging assets. In addition, you can specify that users can only use keywords from this list, and disallow manually adding other keywords.

To add the first keyword, type it in the field at the bottom of the **Predefined Values** panel and click **Add Keyword** +.

To add a top-level entry to the list, deselect any selected keyword (on Mac, *COMMAND*-click a selection; on Windows, *CTRL*-click a selection), type a keyword, then click **Add Keyword** +.

To add a keyword as a child to an existing keyword, select the would-be "parent" keyword in the list, type the child keyword in the field, then click **Add Keyword** +.

To remove a keyword from the list, select it and click **Remove Keyword** −. If you delete a parent keyword, all of its children will be deleted as well.

To disallow users entering other keywords, enable **Allow Only Predefined Values**.

> **A NOTE ABOUT PREDEFINED VALUES AND SMART KEYWORDS**
> If a catalog has **Allow Only Predefined Values** specified, and a catalog user uses the **Suggest Smart Keywords** feature, the returned keywords will be filtered against the **Predefined Values** list. If a returned Smart Keyword is not in the **Predefined Values** list, it will not be added to the target asset.

Exporting and importing keywords

Once you have entered keywords in the **Predefined Values** list, you can export them to a text file.

To export keywords, click **Export**. The file `Keywords.txt` will be saved to your Downloads folder.

You can also add new keywords by importing a properly-formatted text file.

To import keywords, click **Import**, select the import file and click **Open**.

Keyword text file format

To create a keyword file to import, use NotePad on Windows or TextEdit on macOS. If you are using TextEdit, be sure the file format is plain text; choose **Format > Make Plain Text**.

- Enter one keyword phrase per line.
- Press the *ENTER* or *RETURN* key at the end of each line.

  > **NOTE:** On macOS, some text editors treat the *ENTER* key (in the numeric keypad) differently from the *RETURN* key. Press the *RETURN* key after each line.

- To add a child keyword, press *TAB* before typing the keyword.

  > **TIP:** Some text editors will see the *TAB* as a signal to indent the next line. If this happens and you do not want to enter additional children, just delete the leading tab character.

In the following example, the phrase **`space programs`** is one keyword, with children **`mercury`**, **`gemini`**, and **`apollo`**. The keyword **`apollo`** also has children: **`apollo-soyuz`**, **`lunar landings`**, and **`skylab`**. (The **¶** represents the end of a line, and → represents a tab character.)

```
space programs¶
→    mercury¶
→    gemini¶
→    apollo¶
→    →    apollo-soyuz¶
→    →    lunar landings¶
→    →    skylab¶
```

Creating custom fields

Portfolio users often wonder when to store information in a custom field, and when keywords are more appropriate. In general, keywords should be used to describe the **content** of a file, and custom fields for specific **properties** of the file.

Custom fields are particularly useful for tracking any information about the file that is pertinent to the business model. It would be best to use a custom field to track the following information types: job number, part number, SKU, pricing, any information with a Yes/No option, or any data where predefined variables are possible.

> **NOTE:** For details about field settings for extracting and embedding metadata, see ***Extracting and embedding options*** on page 56.

The types of custom fields in Portfolio are:

- **String:** This field type is designed for single line text values. You can specify a maximum length for the field; String data can be from 1 to 2000 characters long, can include multiple values, and can be configured as a predefined list.
- **Number:** For regular numeric values. Number fields can include multiple values, and can be configured as a predefined list.
- **Decimal:** For regular numeric values. Decimal fields can include multiple values, and can be configured as a predefined list. You can specify the number of digits of precision.
- **Date/Time:** This field type allows you to enter date and time values into your items. While the time is part of the data saved, you can disable the **Show Time** option to have Portfolio only display the date. Date/Time fields can include multiple values, and can be configured as a predefined list.
- **Text Block:** Text Blocks are multi-lined fields that can be any length. This field type allows you to add multiple lines of text to items; you can include line breaks or carriage returns. Text blocks are word-indexed, allowing even these longer fields to be searched extremely quickly.
- **URL:** This field type is used for Web and other URL addresses. When an URL field is displayed in Portfolio clients, it becomes an active, clickable hyperlink that will open a new browser window or tab.
- **Boolean:** This field type is used to indicate a True/False, Yes/No, On/Off, or similar condition.

To create a custom field:

1. Click **Catalogs** and select a catalog.
2. Click **Fields**.
3. Select **Custom Fields** from the pop-up menu.
4. Click **Add** above the **Fields** panel.
5. In the **Add New Custom Field** dialog:
    a. Enter the name for the field.
    While field names can include multiple words, only fields with single-word names can be used to focus searches using QuickFind in Portfolio Web and Desktop clients.
    b. Choose the **Field Type** from the pop-up menu.
    c. **Field options:** Set a maximum length for **String** fields, precision for **Decimal** fields, and whether or not to show time for **Date/Time** fields.
    d. **Default value:** Optionally, you can enter a default value for the field. This value can be changed for each asset from the Portfolio Web and Desktop clients.
    e. **Allow Multiple Values:** For some types of fields, it might make sense to allow multiple values to be entered.
    f. **Has Predefined Values:** You can specify that a field has predefined values, which means that a user entering this information in Portfolio clients can choose a value from a list of possibilities that you define. For details see ***Creating predefined values*** below.
    g. **Allow Only Predefined Values:** Enable this option to present the list of **Predefined Values** as the only values users can search on or add to assets.
6. When you have defined the custom field to your satisfaction, click **Create**.

You can modify a custom field's definition at any time.

Multiple values

Some types of fields work better when they are allowed to contain multiple values. The keywords field, for example, allows multiple individual strings. This is more convenient for data entry and also allows for more efficient storage and searching.

You can create fields that allow multiple values of any single type of data except Text Blocks.

Portfolio Web and Desktop clients allow users to enter as many values as desired into a multi-valued field.

A multi-valued field can be combined with a predefined value list to allow users to choose one or more common or allowed values.

Creating predefined values

The **Predefined Values** list allows you to specify a list of values for users to choose from for tagging assets. In addition, you can specify that users can only use values from this list, and disallow manually adding other values.

To edit a custom field definition, click **Catalogs**, select a catalog, click **Fields**, select **Custom Fields** from the pop-up menu, then select the custom field in the list on the left.

To add a value, type it in the field at the bottom of the **Predefined Values** panel and click **Add Value** +.

To remove a value from the list, select it and click **Remove Value** −.

To disallow users entering other values, select the checkbox labeled **Allow Only Predefined Values**.

To export values, click **Export**. The file `fieldname.txt` will be saved to your Downloads folder, where `fieldname` is the name of your custom field.

To import values, click **Import**, select the import file and click **Open**.

Custom metadata

Your catalog may need to include metadata that is not already built-in to Portfolio. The following steps show you how to add a metadata definition and associate it with a custom field in your catalog.

Adding a custom metadata definition

To add a custom definition:

1. Click **Catalogs** and select a catalog.
2. Click **Fields**.
3. Click **Manage Metadata**.
4. In the **Metadata Definitions** window, click .
   This opens the **Create Metadata Definition** window.
5. Enter the metadata definition:
   - **Name:** The unique name for the metadata.
     The convention used in Portfolio is **XMP - <corporate identifier> - <field name>**; for example, **XMP - Example Company - Example Field**.
     The "field name" represents the custom field that you will create to contain this metadata. The text used here does not need to match the field name exactly, but it should uniquely identify the custom field for your ease in identification.
   - **Type:** Choose **XMP** from the list.
   - **Namespace:** Choose **xap**.
   - **Tag:** Enter the unique tag for the metadata. (The tag is how the metadata is identified by other software.)
     The convention used in Portfolio is to merge the "corporate identifier" and "field name" text, removing all spaces; for example, **ExampleCompanyExampleField**.
   - **Data Type:** Choose the type of data that this definition identifies. (This is the same data type that you will assign to the custom field that you will create.)
   - **Multivalued Type:** If the field will contain more than one value, select **Ordered** or **Unordered**; otherwise, select **Not Multivalued**.
6. When the metadata definition is complete, click **Create**.

You can now create a custom field that is used to embed and extract the metadata that you just defined. For details on adding a custom field to your catalog, see ***Creating custom fields*** on page 59.

Example

In this example, we have a catalog of products that we want to add some standard advertising metadata to. We'll add three metadata definitions: Product Release Date, Manufacturer's Suggested Retail Price, and Product Recall Status. We'll then add these fields to our catalog. (If you want to follow this example, create a dummy catalog that you can work with. Ours is named **Products**.)

1. Click **Catalogs**, select the Products catalog (or your dummy catalog), click **Fields**, then click **Manage Metadata**.
2. Click and enter the following for the first metadata definition:
   - **Name:** XMP - Our Company - Release Date
   - **Type:** xap
   - **Tag:** OurCompanyReleaseDate
   - **Data Type:** Date/Time
   - **Multivalued Type:** Not Multivalued
3. Click **Create** to create the first metadata definition.

4. Click ⊕ and enter the following:
   - **Name:** XMP - Our Company - MSRP
   - **Type:** xap
   - **Tag:** OurCompanyMSRP
   - **Data Type:** Decimal
   - **Multivalued Type:** Not Multivalued
5. Click **Create**.
6. Click ⊕ and create the final metadata definition:
   - **Name:** XMP - Our Company - Recall Status
   - **Type:** xap
   - **Tag:** OurCompanyRecallStatus
   - **Data Type:** Boolean
   - **Multivalued Type:** Not Multivalued
7. Click **Create**, then click **OK** in the **Metadata Definitions** window.
8. Click **Add Field** ⊕.
9. Define the field as follows:
   - **Name:** ReleaseDate (note that we do not use a space in the field name; this makes custom searches much easier to perform)
   - **Field Type:** Date/Time
   - **Show Time:** False (leave this option deselected)
   - **Allow Multiple Values:** False (deselected)

   Click **Create** to create the new field in your catalog.

   Continue editing the field settings:
   a. Click **Add Extract Metadata** ⊕.
   b. In the **Add Extract Metadata** dialog, choose **XMP - Our Company - Release Date** (as created above) and click **Add**.
   c. Under **Embed in Metadata**, choose **XMP - Our Company - Release Date** from the drop-down menu.
10. Click **Add Field** ⊕ and create, then edit the MSRP field:
    - **Name:** MSRP
    - **Field Type:** Decimal
    - **Precision:** 2
    - **Add Extract Metadata:** XMP - Our Company - MSRP
    - **Embed in Metadata:** XMP - Our Company - MSRP
11. Click **Add Field** ⊕ and create and edit the final field:
    - **Name:** RecallStatus (do not use spaces)
    - **Field Type:** Boolean
    - **Default Value:** False (deselected)
    - **Add Extract Metadata:** XMP - Our Company - Recall Status
    - **Embed in Metadata:** XMP - Our Company - Recall Status

Testing your custom metadata

If you have created a dummy Watch Folder catalog and added the new fields following the example above, you can use Portfolio Web or Desktop to confirm that your metadata and custom fields are "working" correctly.

In Portfolio Web or Desktop:

1. Add an asset to your dummy catalog.
2. Enter metadata for the new asset using the new custom fields.
   Since we turned on embedding for our custom definitions, the metadata will be written to the original file.
3. Delete the asset from your catalog. Do not delete the original file from disk!
4. Refresh the catalog to see that Portfolio has re-cataloged the file.
5. Look at the metadata for the re-catalogued asset. It should include the data you entered originally.

Custom XMP namespaces

You may find a need to add an XMP namespace and associated metadata to your catalog that is not currently available within Portfolio.

The process for doing this is:

- add the new XMP namespace;
- add the custom metadata definition; and
- add a new field using the custom metadata.

Note that the new XMP namespace and metadata definitions are available to use in any catalog, but you need to add custom fields that are mapped to the new metadata to any catalogs where you want to include the custom metadata.

Custom metadata in an existing namespace

While you can add a namespace for your custom metadata, you may not need to. Many applications do not support custom namespaces. Unless your organization or industry has created a namespace that is not already available in Portfolio, you should add custom metadata to the **xap** namespace.

Adding an XMP namespace

XMP is a technology developed by Adobe to allow you to embed a file's metadata—information about the file, separate from its actual content—in the file itself. For example, a word processing document could include the language it is written in and the number of words it contains, or a photograph could include the geographic coordinates and date and time for where and when it was taken.

XMP defines specific rules for including metadata of many different kinds, and many organizations take advantage of XMP to define metadata standards for their industries.

To add an XMP namespace within Portfolio Administrator:

1. Click **Catalogs** and select a catalog (it doesn't matter which one; the XMP namespace will be available to all catalogs).
2. Click **Fields**.
3. Click **XMP Namespaces**.
4. In the **XMP Namespaces** window, click .
5. Enter the abbreviation for the namespace and the namespace's URI, then click **Submit**.
6. Click **OK** in the **XMP Namespaces** window.

> **TIP:** You can also add a namespace directly from within the custom metadata field editor.

After you create a namespace, you need to add metadata definitions and custom fields that support the namespace.

Adding custom metadata definitions

Your custom namespace also needs custom metadata definitions and custom fields to support them.

To add a custom definition:

1. Click **Catalogs** and select a catalog.
2. Click **Fields**.
3. Click **Manage Metadata**.
4. In the **Metadata Definitions** window, click .
   This opens the **Create Metadata Definition** window.
5. Enter the metadata definition:
   - **Name:** The unique name for the metadata. You may wish to preface it with an abbreviation for the namespace or metadata type.
     The convention used in Portfolio is **<namespace> - <corporate identifier> - <field name>**; for example, **XMP - Example Company - Example Field**.
     "namespace" is the abbreviation for your custom namespace, and "field name" represents the custom field that you will create to contain this metadata.
   - **Type:** Choose **XMP** from the list.
   - **Namespace:** Choose your custom XMP namespace.
   - **Tag:** Enter the unique tag for the metadata. (The tag is how the metadata is identified by other software.)
     The convention used in Portfolio is to merge the "corporate identifier" and "field name" text, removing all spaces; for example, **ExampleCompanyExampleField**.
   - **Data Type:** Choose the type of data that this definition identifies. (This is the same data type that you will assign to the custom field that you will create.)
   - **Multivalued Type:** If the field will contain more than one value, select **Ordered** or **Unordered**; otherwise, select **Not Multivalued**.
6. When the metadata definition is complete, click **Create**.

You can now create a custom field that is used to embed and extract the metadata that you just defined. For details on adding a custom field to your catalog, see ***Creating custom fields*** on page 59.

Ingest settings

Ingest covers a multitude of options that can be applied to assets as they are added to a Portfolio catalog.

All of these options can be specified by a Catalog Administrator.

Ingest settings fall into three categories: **Cataloging Options**, that allow you to restrict the files that are allowed in a catalog and create basic keywords based on a cataloged file's name and location; **Managed Upload**, that allows you to specify metadata that a user must apply to assets as they are added to a catalog; and **Previews**, that lets you specify restrictions on and the location of preview files that Portfolio generates for image and media assets.

> **TIP:** While Smart Keywords can be applied optionally to assets as they are added to a catalog, these settings are separate from the **Ingest** settings. See ***Smart Keywords*** on page 70 for details.

To access the **Ingest** settings, click **Catalogs** on the left, select a catalog, then click **Ingest** above the panel on the right.

Cataloging Options

Create Keywords from Path

Often, a user will catalog files that exist in a specific organized folder structure. Portfolio can leverage this structure and create keywords for each cataloged file based on its path and filename.

Under **Create Keywords from Path**, select one or more path components to include as keywords.

> **TIP:** If you typically do not organize your files into a meaningful folder hierarchy before cataloging, you may wish to disable these options; otherwise, your assets will include irrelevant keywords.

File and Folder Exclusions

Portfolio can be forced to ignore files with a specific filename by creating an "exclusions" list of file names or patterns.

Under **File and Folder Exclusions**, there is a list that is pre-populated with common patterns of files that you will probably want to exclude from your catalogs.

To exclude other files or folders that follow a specific naming pattern:

1. Select the file name search parameter from the drop-down menu: **Starts with**, **Ends with**, or **Contains**.
2. Enter the filename or partial name that you want to exclude from cataloging. (Letter case is ignored.)
3. Click **+**.

Portfolio searches each path name and each segment of the path for text strings matching any of the parameters you enter. For example, if you enter `Starts with: DUP` and `Ends with: 97`, Portfolio will exclude `Duplicate_PH050`, `Report_97`, and `C:\Duplicates\Image.jpg`.

To exclude specific file types from your catalog, add an **Ends with** entry specifying the file extension to exclude. Note that you may need to create more than one entry, such as `.tiff` and `.tif` to exclude all TIFF files.

To remove an exclusion, select it in the list and press *DELETE*.

File Types

You can configure a catalog to allow only files of specific types, such as Audio. Portfolio's file type definitions include files with one or more extension; the Audio file type includes the extensions `aac`, `aif`, `aiff`, `aifc`, `au`, `snd`, `m4a`, `mp3`, `ogg`, `wav`, and `wma`.

By default, catalogs accept files of all types. To change the file types allowed in a catalog:

1. Under **File Types**, select **Catalog Only** to reveal a list of file types that will be cataloged.
2. In the list of file types, clear the check boxes for the types of files that you want to exclude from the catalog.
   To view the file extensions that are included in a file type, click the file type in the list.

Changes are saved automatically, so when you are finished updating your catalog, you can start another task or log out from Portfolio Administration.

If you don't need to restrict files by type, then select **Catalog All File Types**.

Custom File Types

You can add a file type and associated list of file extensions.

1. Click **+** below the list of file types.
2. Enter the **Custom Title** for your file type.
   You cannot re-use an existing file type.
3. In the **Extensions** field, enter a list of file extensions to include in your file type. Separate the file extensions with commas. You should not include the "dot" as part of the extension.
4. Click **Add File Type**.

> **EXAMPLE:** To create a file type for word processing documents, enter "Word Processing" as the custom title, and `doc,docx,odt,ooxml,pages,rtf,sxw,tex,tmd,txt,wp,wp7,wpd` as the list of extensions.

To edit a custom file type, select it in the list, make your changes, then click **Update File Type**.

To delete a file type, select it in the list and click **–** below the list of file types. **NOTE:** You are allowed to delete default file types.

To reset default file types, click **Reset Defaults**.

> **IMPORTANT:** This will delete all custom file types, restore any deleted built-in file types, reset the list of extensions for each file type, and set the **Catalog All File Types** option.

> **TIPS**
>
> - If you only want to catalog a subset of the extensions included in a built-in file type (such as only MP3 files instead of all Audio files), disable the built-in file type, create a new type with a similar name (such as "Audio-MP3 only"), and add your desired extensions (in this example, just add `mp3`).
> - You can judiciously combine File Types with exclusions that you specify under **Cataloging Options**. If you want to include only MS Word files but do not want to allow templates in your catalog, set **File Types** to **Catalog Only** and select MS Word as the allowed file type, and under **Cataloging Options**, exclude files and folders whose name ends with `.dot` or `.dotx` (the extensions for MS Word template files).

Managed Upload

Portfolio allows you to request or require the user to add certain metadata when they add files to a catalog. This is called **Managed Upload**.

To enable Managed Upload, check the box labeled **Use Managed Upload**.

The list on the left shows the metadata fields available to the catalog; the list on the right shows the metadata to be entered when a file is added to the catalog.

- **Form Header:** Enter a message to display to a user when they are prompted to enter metadata for uploaded files.
- **Fields:** When a user uploads files, they will be prompted to enter data for the fields listed on the right. Drag fields from the list on the left into the list on the right.
- **Required:** Check this box for each field that must be filled in before the user is allowed to upload files.

Drag entries within the list on the right to re-arrange them; select an entry and press *DELETE* to remove it.

Click **Apply** to set the Managed Upload criteria for the selected catalog, or click **Revert** to return to the last-saved configuration.

Previews

Portfolio creates a preview image or clip of each file that you catalog. This allows clients to see high-quality previews of cataloged assets without directly accessing the original.

Portfolio can be configured to create and save preview files as assets are cataloged, or to create previews when they are needed.

If you choose to create previews as assets are being cataloged, the preview images or clips will be available to Portfolio Web and Desktop client users at any time. This is true even if the original file is offline—such as files cataloged from a DVD or network volume that is not currently mounted.

If you do not create previews as assets are cataloged, Portfolio will create previews when a Portfolio client user attempts to open a thumbnail's preview. If the original file is offline, the client will display the thumbnail image instead of a high-quality preview or clip.

If Portfolio creates preview files or clips while assets are cataloged, the catalog will require more disk space. If previews are created on demand, server disk space requirements are reduced, but previewing an image will be slower.

Preview and clip options

IMPORTANT: Preview images and clips can use a lot of disk space, especially if you choose large maximum image size, video resolution, and clip duration. If you anticipate that previews may exceed the disk space available on your server, you can change this path to a folder elsewhere on the server, or to a shared folder on the network that is accessible to the server.

- **Maximum image size:** Specify the maximum dimension for the preview image. This value cannot exceed 4000 pixels.
  Larger values result in larger preview images, which will consume more disk space.
- **Generate clips for audio/video files:** Select this to have Portfolio generate a preview clip of any supported audio or video file that gets added to a catalog. If this option is disabled, then a preview image will be generated for video files. Preview clips will not be generated "on demand" for users.
- **Maximum video resolution:** Specify the maximum resolution for preview clips. If the original video is of lower resolution than the selected option, the preview clip will retain the lower resolution. Lower resolution clips will appear smaller or grainier on screen but will use less disk space.
- **Limit duration to:** Set the maximum length of the preview clip.
  Longer clips will use more disk space.
- **Save previews and clips in this folder:** This is the path where preview images and clips will be saved. Type a new path or click **Browse** to select a new location.

  > **TIP:** Unless you have a need to store a specific catalog's previews in a location other than the default, we recommend leaving this setting alone.

  The Portfolio Administrator can specify the default location for preview folders. See ***Server data locations*** on page 38.

  > **PATH FORMATTING**
  > The folder path to the `Previews` directory must be represented in Universal Naming Convention (UNC) format. This means that share paths on a separate volume from the Portfolio software need to include the actual server, share, and target directory, and not a mapped drive letter; for example:
  > **Windows:** `\\Server\Share\Previews`
  > **Mac:** `/Volumes/Xserve/Share/Previews`
  > Be sure to choose a network share that gives Portfolio read/write access.

To have your changes take effect, click **Apply**. If the target location for screen previews does not exist, Portfolio creates the new directory. The network path must be valid for Portfolio to create a preview folder.

Generating previews for previously cataloged files

You can have Portfolio generate screen previews for your files, even after they've been cataloged, using Portfolio Web or Desktop.

1. Open the catalog in the Portfolio Web or Desktop client.
2. Select entries in your catalog for which you want to create screen previews.
3. Right-click in the selection and choose **Regenerate Thumbnail** from the shortcut menu.

Smart Keywords

The Smart Keywords module is made available for unlimited use for accounts that have an active Annual Service Agreement (ASA). Your users can add Smart Keywords from all categories and languages with no additional charge.

Configuring Smart Keywords

To configure Smart Keywords for a catalog:

1. Click **Catalogs** and select a catalog.
2. Click **Smart Keywords**.
3. Select the checkbox labeled **Use Smart Keywords in this Catalog**.
4. You can select **Smart Keyword newly cataloged assets** to automatically add Smart Keywords to assets as they are cataloged.
5. Use the sliders to set the maximum **Number of Keywords** (1 to 20) and the **Confidence Level** (1 to 100) of the returned Smart Keywords.
   Setting the maximum number higher does not guarantee that more keywords will be returned.
   The **Confidence Level** is an estimate of how accurately the returned Smart Keywords will match the image submitted; a higher number will probably result in fewer, and possibly no, Smart Keywords being returned.
6. Under **Smart Keyword Engines**, choose the keyword categories ("engines") to make available to your users. They will have the option of selecting from among the categories that you enable here.

   > **NOTE:** The category **NSFW** will return one of two keywords: **NSFW** (meaning the submitted image was found "Not Safe For Work") or **SFW** ("Safe For Work").

7. Under **Languages for General Engine**, choose the languages to make available to your users. For keywords returned by the **General** category, they will be able to choose from among the languages that you enable here.

   > **NOTE:** Categories other than **General** only return keywords in English.

Using Smart Keywords

Smart Keywords are not infallible; the service can recognize common elements and even people in clear, straightforward images. A Picasso painting, comic book page, or screen shot of a smartphone app will not return valuable information.

The Smart Keyword categories (called "engines") speak for themselves, and you should caution your users against using the feature for all assets in their catalog.

You may wish to monitor your users to determine whether the Smart Keyword return rate and accuracy are acceptable; adjust the **Number of Keywords** and/or **Confidence Level** to return Smart Keywords that better meet their needs.

Reports

You can generate reports about Portfolio assets for a single catalog or all catalogs. The reports available are:

- **Assets - Uploads:** This report lists the assets, their catalog, who uploaded each, and when each was uploaded.
- **Assets - Most Downloaded:** This report lists the assets that have been downloaded and how many times each has been downloaded.
- **Assets - Most Previewed:** This report lists the assets that have been previewed and how many times each has been previewed.
- **Assets - Deletions:** This report lists the assets that have been deleted, the catalog each was in, who deleted each, and when each was deleted.
- **Assets - Downloads:** This report lists the assets that have been downloaded, the catalog each was downloaded from, who downloaded each, and when each was downloaded.
- **File Types:** This report shows two pie graphs: one showing the number of files cataloged by extension, the other showing the total size of files for each extension.
- **Search Terms:** This report lists each term that was searched using QuickFind in a Portfolio client or NetPublish, and how many times each term was searched from each source.
- **Keyword Statistics:** This report lists the keywords in use, their frequency, and which keywords have been added as Smart Keywords.
- **NetPublish - Usage:** For a selected date range and site, this report identifies which users downloaded which assets, and when. (This report requires a NetPublish license.)
- **NetPublish - Most Downloaded:** For a selected date range and site, this report identifies which assets were downloaded and how many times each was downloaded. (This report requires a NetPublish license.)

Enabling NetPublish site reporting

In order for Portfolio to gather data for NetPublish reports, you must enable data collection for your NetPublish sites.

This is done through the NetPublish feature in the Portfolio Web or Desktop client.

To enable NetPublish Report data collection:

1. Open the Web or Desktop client.
2. Select a catalog.
3. Click **NetPublish** in the main toolbar at the top of the client window.
4. In the Site Builder, choose **Edit Existing Site**, then choose a site from the pop-up menu.
5. Under **Reporting**, select **Collect site data**.
6. Specify the number of days to retain report data.
7. Click **Publish Now**.

Repeat this for each site that you want to gather report data for.

Generating a report

You can view report data in your browser, or download a report in the form of a tab-separated values (.TSV) text file that can be opened in a spreadsheet program, text editor, or word processor.

To generate a report:

1. Click **Reports**.
2. Select a report.
3. ■ For the **Assets** and **Search Terms** reports:
    a. Choose a catalog or **All Catalogs** from the pop-up menu.
    b. Select the starting date (**From**) and ending date (**To**) for the report.
    c. Click **View Report** to open a new browser tab or window with the report data, or click **Download Report** to download the report data.
    ■ For the **File Types** and **Keyword Statistics** reports:
    a. Choose a catalog or **All Catalogs** from the pop-up menu.
    b. Click **View Report** or **Download Report**.
    ■ For the **NetPublish** reports:
    a. Click the **Site** pop-up menu and select the site that you want to report on, or select **All Sites** to generate a report on all sites for which reporting data is saved.
    b. Select the starting date (**From**) and ending date (**To**) for the report.
    c. Click **View Report** or **Download Report**.

Reports are downloaded to your browser's Downloads folder. Open report files with your favorite spreadsheet application.

Portfolio NetPublish sites

In versions prior to Portfolio 3.6.3, a Catalog Administrator could manage all aspects of their Portfolio NetPublish sites from either Portfolio clients or from Portfolio Administration.

Most of these features have been removed from Portfolio Administration but remain fully accessible from Portfolio Web and Desktop clients.

A Catalog Administrator can still change the availability or completely delete any NetPublish sites associated with any of their catalogs from within Portfolio Administration.

To enable or disable a NetPublish site, click **NetPublish**, choose a site, then select or deselect the checkbox labeled **Site Enabled**.

To delete a NetPublish site, click **NetPublish**, choose a site, click **Delete Site**, then click **OK** in the confirmation dialog.

NetPublish Site settings

To change any of the settings for a NetPublish site, use the Web or Desktop client.

1. Select a catalog.
2. Click **NetPublish** in the main toolbar at the top of the client window.
3. In the Site Builder, choose **Edit Existing Site**, then choose a site from the pop-up menu.
4. You can modify any aspect of the NetPublish site at this point. The settings that could be changed through Portfolio Administration prior to version 3.6.3 are:
   - **Security:** Set whether a login is required, assign a site password, or allow only specific user accounts to access the site.
   - **Expiration:** Set a site expiration date, and determine whether the site is taken offline or deleted completely when it has expired.
   - **Request Access:** For sites where a login is required, you can determine whether a site visitor can request access, specify the information required for access, and enter an email address to send the access request to.
   - **Reporting:** Specify whether to collect reporting data from the website, and how many days' worth of data should be retained. (The number of days of data will determine the time range available for NetPublish site reports.)

To save changes to the site, click **Publish Now**.

For details on editing a NetPublish site, see the **NetPublish** section of the Portfolio Client documentation.

Additional tasks

Custom catalog templates

If you expect to create multiple catalogs using the same custom settings, you can create a template to use as the basis for new catalogs.

You can use an existing catalog as a template, or create a new catalog specifically for the purpose.

A saved template retains the parent catalog's fields, metadata mappings, and cataloging options settings. It does not include any users or data added to the parent catalog.

Settings that you specify for your template will be used as defaults for catalogs based on the template, but can be modified for each catalog.

To create a template:

1. Click **Catalogs**.
2. Select a catalog to use as the basis for the template, or create a new catalog for the purpose.
   If you are creating a new catalog, you should use the **General Use** template as a starting point; it includes all the System Fields. We also recommend creating the template as a **Watch Folders** catalog without an AutoSync folder.
   For details on built-in templates, see ***Catalog templates*** on page 35.
3. With the template catalog selected, click **Fields** and make sure the desired fields are included, especially any custom fields that you need for your catalogs.
4. Click **Ingest**, then click **Cataloging Options**. Make sure the desired **Keywords**, **Exclusions**, and **File Type** options are selected.
5. Click **Managed Upload**. Enable or disable the **Managed Upload** option, specify a form header, add fields to the upload form, then click **Apply**.
   See ***Managed Upload*** on page 67 for more information.
6. Click **Previews** and specify options for preview images and clips, then click **Apply**.
   NOTE: You don't need to change the default location for the Previews folder; catalogs based on your template will have this set based on the global Portfolio setting. See ***Previews folder*** on page 39.
7. Click **Smart Keywords**. Enable or disable **Smart Keywords**, and set Smart Keyword options. These settings will be used as defaults for catalogs created from your new template, but can be modified for each catalog.
   See ***Smart Keywords*** on page 70 for more information.
8. Click **General**, click **Save Catalog Template**, enter a name for the template, then click **Save**.

The new template will be available from the **Catalog Template** drop-down menu the next time that you create a catalog.

> **NOTE:** Modifying fields, metadata mappings, or cataloging options for a template's parent catalog does not modify the template or any catalogs created using the template.

Editing a template

While you can't edit a template directly, you can effectively modify the template by editing its original parent (or a new catalog based on the template) then saving a new template.

Renaming a template

To rename a template:

1. Click **Catalogs**, select a catalog, then click **Manage Catalog Templates**.
2. Double-click a template, type a new name, then click **Save**.
3. Click **OK** when you are done managing templates.

Deleting a template

To delete a template:

1. Click **Catalogs**, select a catalog, then click **Manage Catalog Templates**.
2. Select a template, click ⊖, then click **OK** in the confirmation dialog.
3. Click **OK** when you are done managing templates.

> **NOTE:** Deleting a template does not affect existing catalogs that are based on that template.

Adding Watch Folders

A Watch Folder catalog keeps track of the files in one or more folders (called AutoSync or Watch Folders); when a user adds or changes a file in one of these folders, Portfolio sees the change and updates the catalog as necessary (by cataloging a new file or updating new or modified metadata from a changed file).

A Watch Folder catalog can have an AutoSync folder that is created at the time the catalog is created. A Catalog Administrator can add multiple Watch Folders to a catalog to improve the workflow for individual users.

A new Watch Folder must be on a share that is accessible by the Portfolio server system.

- If your Portfolio server is running on macOS, the folder must be on a volume that is mounted on the Portfolio system, and the user account that Portfolio is running under must have read/write access to the folder.
- If your Portfolio server is running on Windows Server, the folder must be accessible through the network to the Portfolio user account, and this user account must have read/write access to the folder.

A Catalog Administrator can add Watch Folders to a catalog from the Portfolio Web or Desktop Client.

To add a Watch Folder:

1. Open your browser and start Portfolio Web, or launch the Portfolio Desktop client.
2. At the bottom of the **Organizers** panel, click **+** and choose **New Watch Folder**.
3. Enter a folder path or browse and choose the folder to watch.
4. Select a synchronization setting:
   - **When changes are found:** Portfolio continually watches the folder and synchronizes with the server when a change is found.
   - **When a user selects Synchronize Folder:** The folder is synchronized manually. To synchronize, right-click the folder in the **Organizers** panel and choose **Synchronize Folder** from the shortcut menu.
   - **Every (time interval) :** The folder will be synchronized at regular intervals. Choose a time interval from the pop-up menu.
5. Check **Remove missing assets from Catalog** to have a catalog entry removed if its associated asset is no longer present in the Watch Folder.
6. Click **Save** to create the Watch Folder.

To change the synchronization settings for a Watch Folder:

1. In the Web or Desktop Client, double-click the Watch Folder in the **Organizers** panel.
2. Change the desired settings and click **Save**.

You cannot change the synchronization settings for an AutoSync folder that was created with the Watch Folder catalog.

Exporting a Vault catalog

Before you delete a Vault catalog, you may wish to export the assets and optionally their metadata.

These instructions assume you wish to export all assets; if not, you can create a gallery with the assets you want to export (or even just flag the desired assets) and export that gallery.

To export all assets from a catalog:

1. Log in to the Portfolio Web or Desktop client as a Catalog Administrator.
2. Select a catalog.
3. Right-click on the **All Items** organizer and choose **Download Contents**.
   You can also right-click on the catalog's folder (the top-level folder at the bottom of the **Organizers** panel).
4. When prompted to download, click **OK**.

The assets will be downloaded to a file named `archive.zip` in your Downloads folder.

To export metadata for all assets in a catalog, right-click on the **All Items** organizer and choose **Export Field Values**.

The metadata will be downloaded as a file named `YYYY-MM-DD_hh-mm_Export.txt`, where `YYYY-MM-DD` is the year, month, and date the file was exported, and `hh-mm` is the time.

Exporting assets with their folder structure

The process above exports assets in a ZIP file without regard for any folder organization you may have imposed on them within the Vault catalog.

You can also export assets from the Vault catalog so that they retain their organization.

1. Right-click on the **All Items** organizer or the catalog folder and choose **Copy/Move/Export Contents**.
2. In the dialog, select **Export**.
3. Choose the **Destination Folder**, then click **Export**.

NOTE: Since the asset files are not exported in a compressed ZIP file, this method can be slow and consume a lot of disk space.

Contacting Extensis

Extensis

1800 SW First Avenue, Suite 500
Portland, OR 97201
Web: https://www.extensis.com/

Extensis Europe

Suites 17 & 18, Newton House
Kings Park Road, Moulton Park
Northampton NN3 6LG, United Kingdom

Customer Support

Support Form: https://help.extensis.com/hc/en-us/requests/new/

Sales

Web: https://www.extensis.com/contact-us-form/ (all regions)
We also work with resellers around the world; find one near you.

Extensis: `https://www.extensis.com/`
Support Form: `https://help.extensis.com/hc/en-us/requests/new/`
Sales: `https://www.extensis.com/contact-us-form/`
Extensis Channel Partners: `https://www.extensis.com/resellers/`

Support

Use these resources to get answers to questions you have about Portfolio and other Extensis products.

Portfolio

Portfolio 3 Support
This page links to installers and uninstallers, PDF downloads, and other common support resources.

Portfolio System Requirements
Full system requirements and other information about the current version of Portfolio.

Portfolio Release Notes
Historical release notes for all updates to the current major release of Portfolio.

Portfolio Knowledge Base
Articles describing situational issues and solutions to user-reported problems with Portfolio.

Portfolio How-to Videos
Get hands-on help through short video tutorials.

Portfolio: Compatibility Guide
This page provides details on the compatibility of Portfolio with recent operating systems.

General resources

Knowledge Base
Search for articles about any current Extensis product, and retired versions as well.

Support Services
Details about types of support and hours of availability, including our Support Policy.

Our Support Policy in a nutshell
Extensis provides full support for the current version of all shipping products. In addition, Extensis provides limited support for older products up to one year after the product version is no longer offered for sale.

Extensis Videos on Vimeo
Hundreds of training sessions, events, and webinars. These are mostly in English, but there are some gems in French and German as well.

Extensis Videos on YouTube
Training, event, and educational videos.

Portfolio 3 Support: https://www.extensis.com/support/portfolio-3/
Portfolio System Requirements: https://www.extensis.com/support/portfolio-3/system-requirements
Portfolio Release Notes: https://www.extensis.com/support/portfolio-3/release-notes/
Portfolio Knowledge Base: https://help.extensis.com/hc/en-us/categories/115001598908
Portfolio How-to Videos: https://help.extensis.com/hc/en-us/sections/115004131287
Portfolio: Compatibility Guide: https://www.extensis.com/support/portfolio-support-guide/
Knowledge Base: https://help.extensis.com/hc/en-us/
Support Services: https://www.extensis.com/support/support-policy/
Extensis Videos on Vimeo: https://vimeo.com/extensis/videos/
Extensis Videos on YouTube: https://www.youtube.com/user/extensisblog

Support Form

Use this form to submit a support case.

Provide as much of the following information as you can:

- Your email address;
- As the Subject, a brief description of the problem you are having;
- A more detailed description of the problem: when it occurs, whether you can reproduce it, whether it has caused you to lose data, and any other details to help our staff track down the issue.
- Your company name or account number;
- The type of support you need (generally you'll choose **Fix an Issue/Technical Support**);
- The product you're using;
- The version of the product (generally this is in the product's **About** box);
- Your operating system;
- Any creative application that might also be affected.

You can also attach a screen shot or other file related to your issue.

Chat

Click at the bottom right of any page of the Extensis website. (Chat is only available between 8:00AM and 3:00PM Pacific time, Monday through Friday.)

Learn and Support

Links to white papers, testimonials, blog posts, and other resources.

Legal resources

Extensis EULA (on page 81)
The legalese description of your rights while using Portfolio and any associated services.

Privacy Policy

Details about information we collect and how we use it, including information specific to Europe and California.

Privacy Shield Policy

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May 2020

Index

— A —

Active Directory 32
adding users 31
Administration password 24
administration requirements 14
Android upload client for Portfolio 45
API 52
API token 31
asset processing log 44
authentication 32

— B —

backing up preview images 29
backup 28

— C —

catalog 32
  deleting 34, 36
catalog templates
  custom 74
changing Administration password 24
changing field settings 56
changing the CMYK profileS 50
checklist for installing and configuring Portfolio .. 11
clip and preview options 69
CMYK profile, changing 50
configuring keyword options 57
creating a catalog 34
custom fields 59
custom metadata 61
custom XMP namespace 63
customizing web client login 45

— D —

data collection, enable for NetPublish reports 71
deleting a catalog 36
desktop client requirements 15
directory service 41-42, 45
  creating a mapping 43
  editing a mapping 43
  importing user accounts 44
  removing 42
  service browser 42
  synchronizing 41
domain user account 20

— E —

editing a directory service mapping 42
editing users 32
email notifications 46
enable data collection for NetPublish reports 71
exporting from vault 76
exporting keywords 58
external Media Engine 25

— F —

field settings 56
Flow for iOS and Android 45

— H —

hardware recommendations 15

— I —

importing keywords 58
importing user accounts 44
installing Media Engine 25
iOS upload client for Portfolio 45

— K —

keywords
  field options 57
  from path 66
  importing and exporting 58
  Smart Keywords 70

— L —

LDAP 32
local user account 21
logs 44

— M —

managing NetPublish sites 73

mapping (directory service) 43
Media Engine 24-25, 27
  installation 25
  requirements 14
membership in catalogs 32
metadata, custom 61
mobile uploads 45
modifying field settings 56
moving the Vault 51

— N —

namespace, XMP 63
NetPublish sites 73
network access for Media Engines 25

— O —

Open Directory 32

— P —

password, changing Administration 24
path keywords 66
port conflicts, resolving 50
Portfolio API 52
Portfolio Flow 45
ports 49
  Media Engines 26
preview and clip options 69
previews
  backing up 29
programming with Portfolio 52

— R —

report 71
restarting Media Engines 27
restore from backup 28
Roles 37

— S —

secure connection 47
server configuration 9
server requirements 14
service browser 42
Single Sign-on 45
Smart Keywords 70
SSL 47
synchronizing Portfolio with a directory service ..41
system recommendations 15
system requirements 14

— T —

templates
  custom 74
TLS 47

— U —

upgrading 18
upload client for iOS and Android 45
user account types 30
user catalog access 33
users 30, 32
  adding 31

— V —

vault catalog
  converting from watch folder catalog 51
vault, exporting from 76
Vault, moving 51

— W —

watch folder catalog
  converting to vault catalog 51
web client
  login customization 45
web client requirements 15
Windows domain user account 20
Windows local account 21

— X —

XMP namespace, custom 63