



Byosphere[®] Quick Start Guide

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Introduction

Protein Metrics Byosphere® is a server repository where Protein Metrics projects and related files can be generated, viewed, and managed. The Byosphere Web Client is a web-based portal to load, view and manage files, project reports, folders, and jobs. The Protein Metrics Byosphere Byos® Client is a client application that allows designated Users to:

- Process MS sample files using various Byos Desktop analysis workflows.
- Inspect projects that have been saved to the Byosphere Server and modify and upload new project versions.

Launch the Byosphere Byos Client

The **Byosphere Byos® Client** can be accessed by clicking the following desktop icon:



Figure 1: **PMi Byosphere Byos® Client** icon

Users should contact their System Administrator to download the PMI Suite, which contains the Byosphere Client Application, if it is not installed already.

Configure the Server

Prior to using Byosphere, a User must have a Byosphere account. Accounts are created and managed by the Byosphere Administrator. When the Administrator creates an account (identified by a valid email address), a welcome email is sent to the User with a web link to set a password in the Byosphere Web Client. Byosphere accounts should be established, and login information provided by the User's System Administrator (likely someone within their IT department).

Open the Byosphere Byos Client and choose **Server > Configure** to set the server URL. This URL should be provided by the User's Internal IT Department. Leave all other settings unchanged.

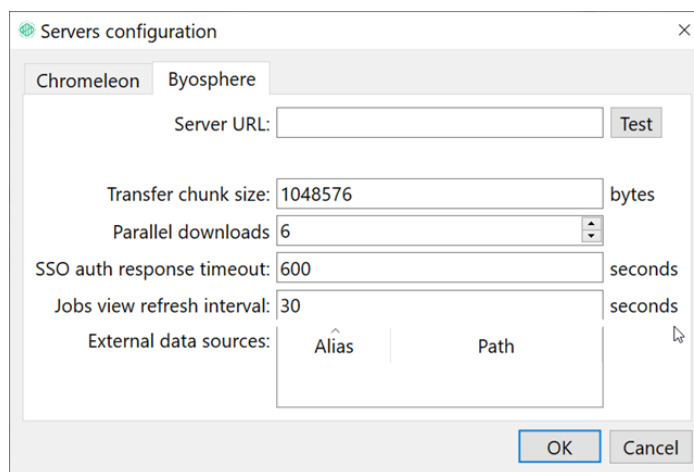
A screenshot of the 'Servers configuration' dialog box. The 'Byosphere' tab is selected. It contains several input fields: 'Server URL' with a 'Test' button, 'Transfer chunk size' set to 1048576 bytes, 'Parallel downloads' set to 6, 'SSO auth response timeout' set to 600 seconds, and 'Jobs view refresh interval' set to 30 seconds. There is also a section for 'External data sources' with 'Alias' and 'Path' columns. 'OK' and 'Cancel' buttons are at the bottom right.

Figure 2: Configure the Byosphere Server

Click **Test** to confirm that the Byosphere Byos Client can connect to the specified URL. If the Test is successful, the words “Connection Succeeded” will appear in green below the Server URL. Click **OK** to connect to the server and login. Thereafter, choose **Server > Login** to log into the server using the credentials provided by the System Administrator:

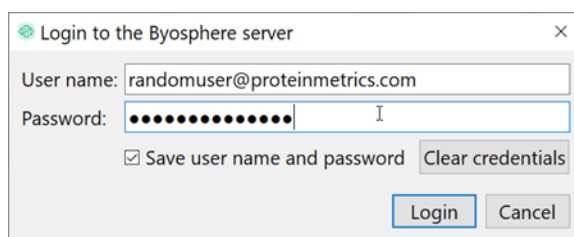


Figure 3: Login to Byosphere server

Upload Files to Server

If the Data Uploader has already been configured for use, the data necessary for use should already be in the server. See the [Appendix](#) for detailed instructions on how to perform manual file uploads.

Launch a Workflow

The Byosphere Byos Client processes Byos workflows to generate analyses (Protein Metrics project files) and web reports on the Byosphere server, rather than on the desktop.

Byosphere has the same default workflow options as Byos. For information on launching custom workflows, see the **Byosphere Byos Client Manual**. To open an installed workflow, click one of the Byos workflow icons:

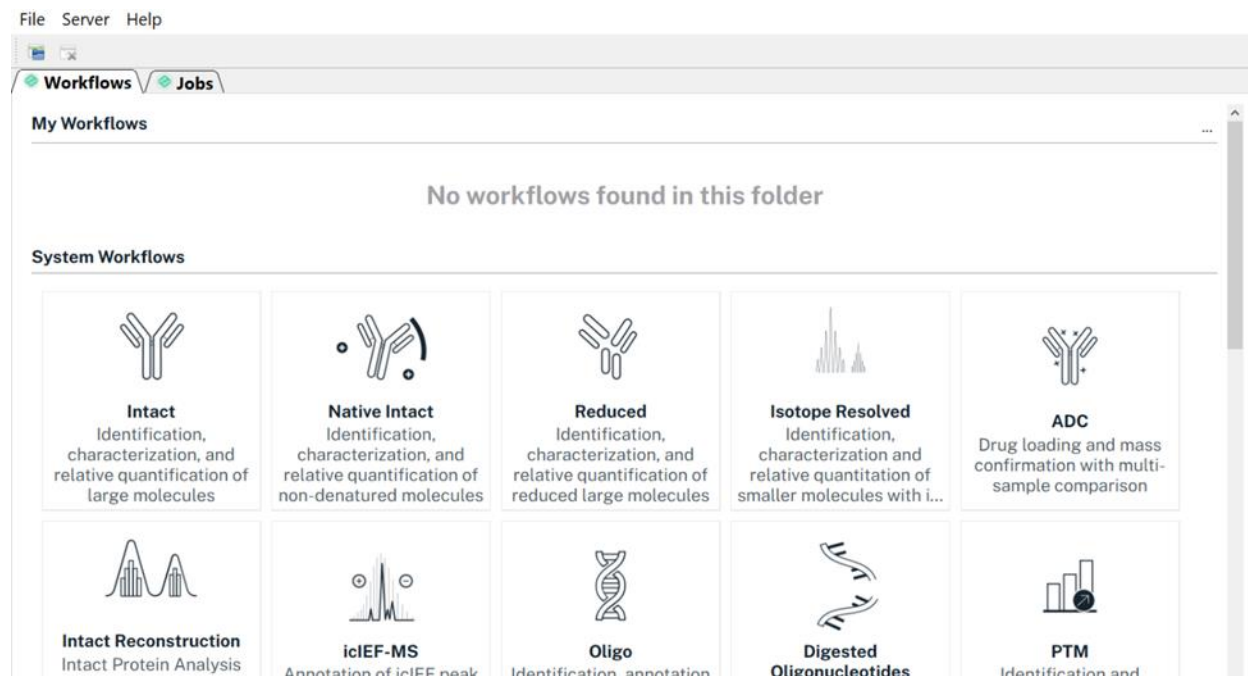


Figure 4: Byosphere Byos workflow icons

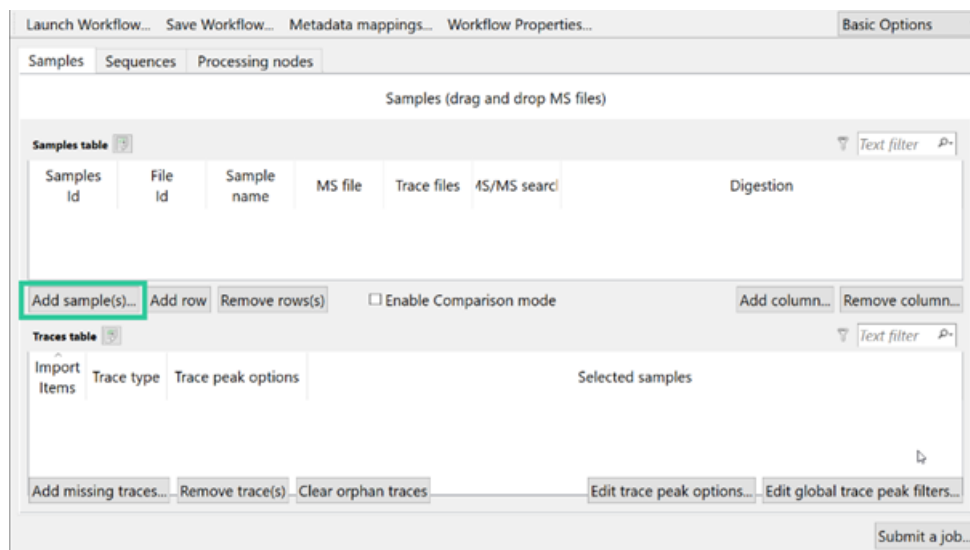


Figure 5: Byosphere Byos Client workflow

Add Sample Files

To add MS sample files to the workflow, click **Add sample(s)**. The **Choose Byosphere server file/folder** dialog opens with the Byosphere Server (ENT) tab selected as default. Select the server folder on the left and select one or more sample files (in *.pacq format) on the right and click **Choose**.

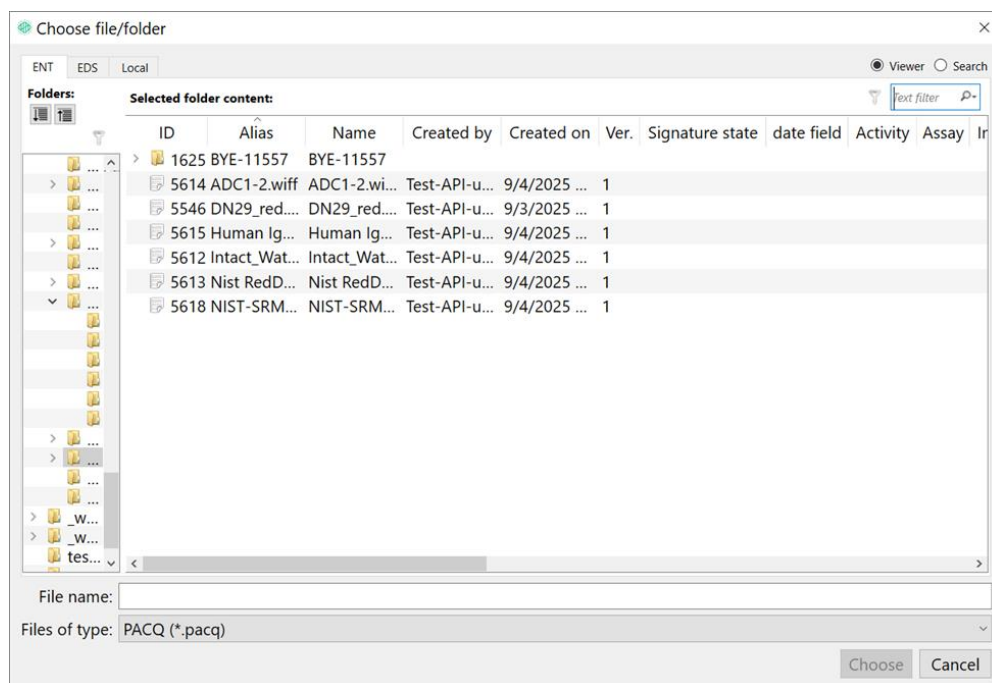



Figure 6: Choose Byosphere server file

Files can also be uploaded from External Data Sources (EDS), the User's Local drive (Local), or Chromeleon (if configured). For more information, see the [Appendix](#).

Add MS/MS or Trace Files

To add an MS/MS file or a trace file to the Samples table, double-click in the **MS/MS file** or **Trace files** cell of the Sample row and click the  button:

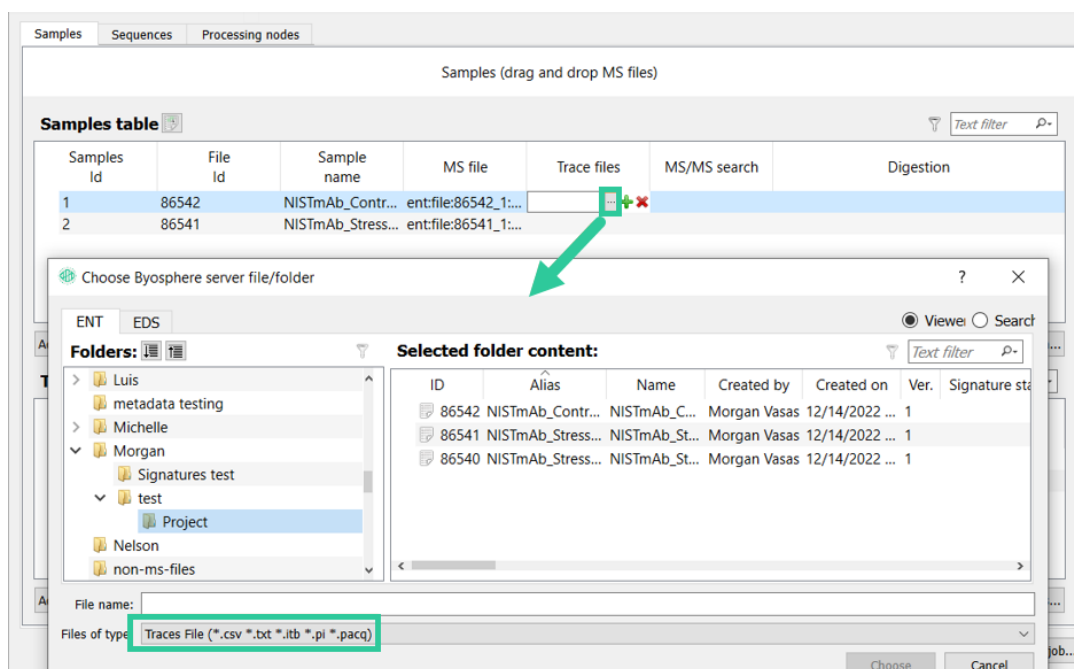


Figure 7: Add a Trace file

MS/MS files can only be loaded from the Byosphere server (ENT) and are filtered for the extension `*.byrs1t` (they are not put into `*.pacq` format). Trace files can be loaded from either the Byosphere server (ENT) or an External Data Source (EDS) and are filtered by trace extensions (`*.csv`, `*.txt`, `*.itb`, and `*.pi`) or by `*.pacq`.

Click **Choose** to load the MS/MS file or the trace file. The **Samples table** will update with the server samples, MS/MS files, and/or trace files. For Intact and Chromatogram Analysis workflows, the Traces table will update with trace records:

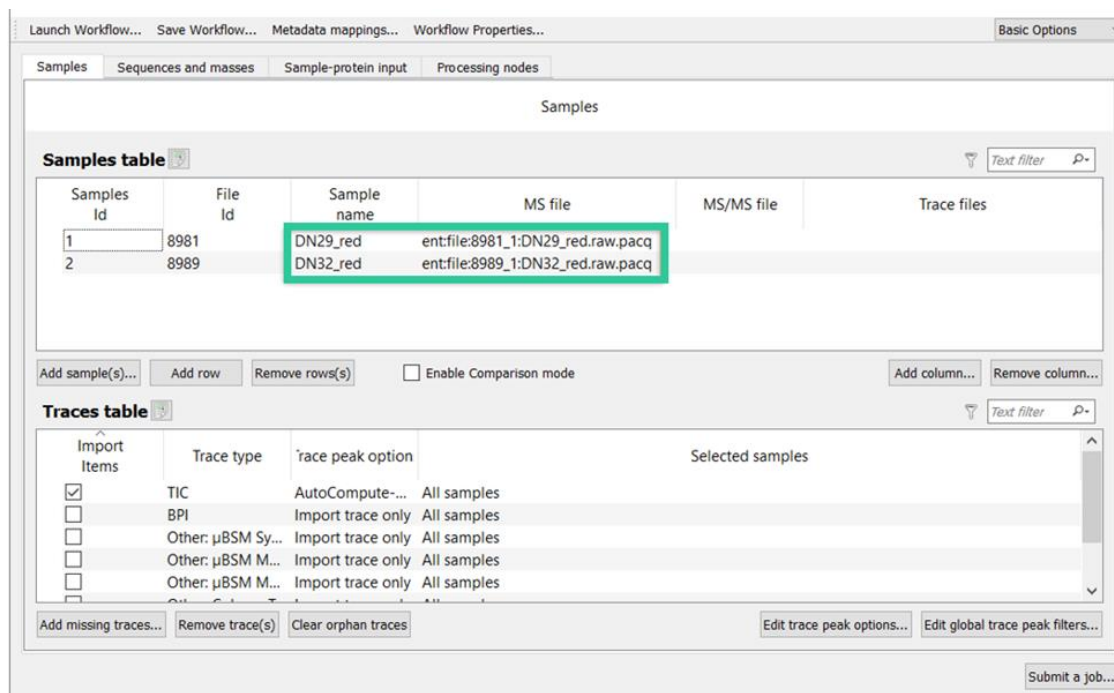


Figure 8: MS sample files and MS/MS file added to the workflow

Load a FASTA file

To load a FASTA file, click the **Browse for FASTA file** button:

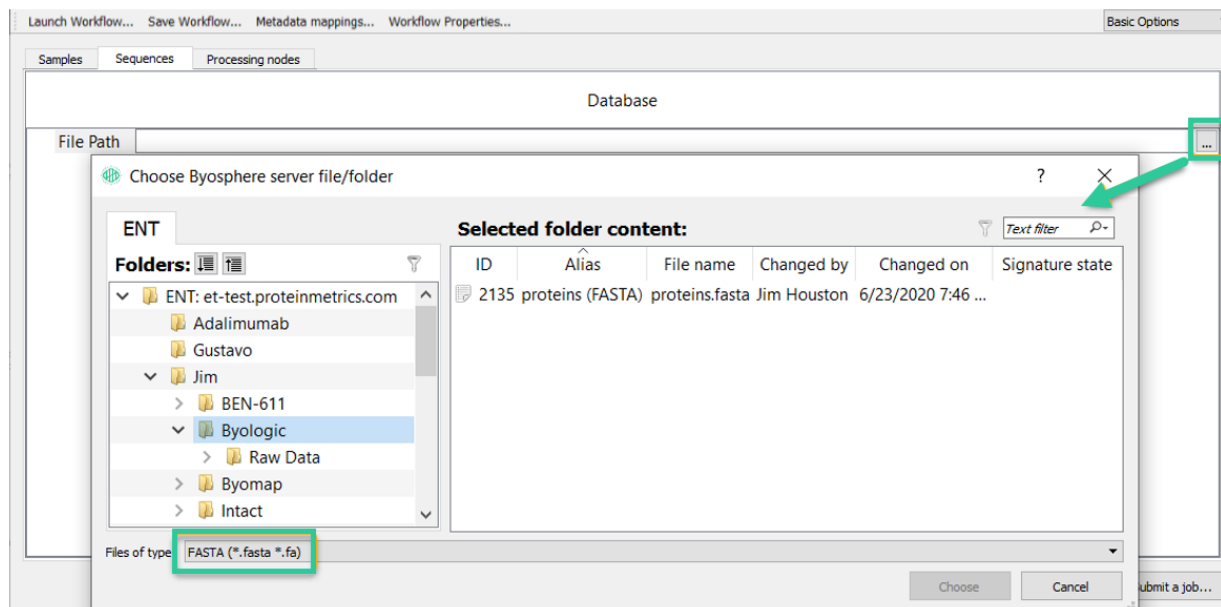


Figure 9: Browse for FASTA file

Navigate to and select the desired file and click **Open**. Check the desired proteins and sequences and click **OK**. The FASTA file contents are then loaded into the workflow. Likewise, delta mass *.csv files and sample-protein input *.csv files can be loaded to a workflow from either the Byosphere server or local directories.

Edit Processing Nodes

The **Processing nodes** tab includes parameter settings for the workflow type (e.g. Byologic), and often for related processes (e.g. Byonic):

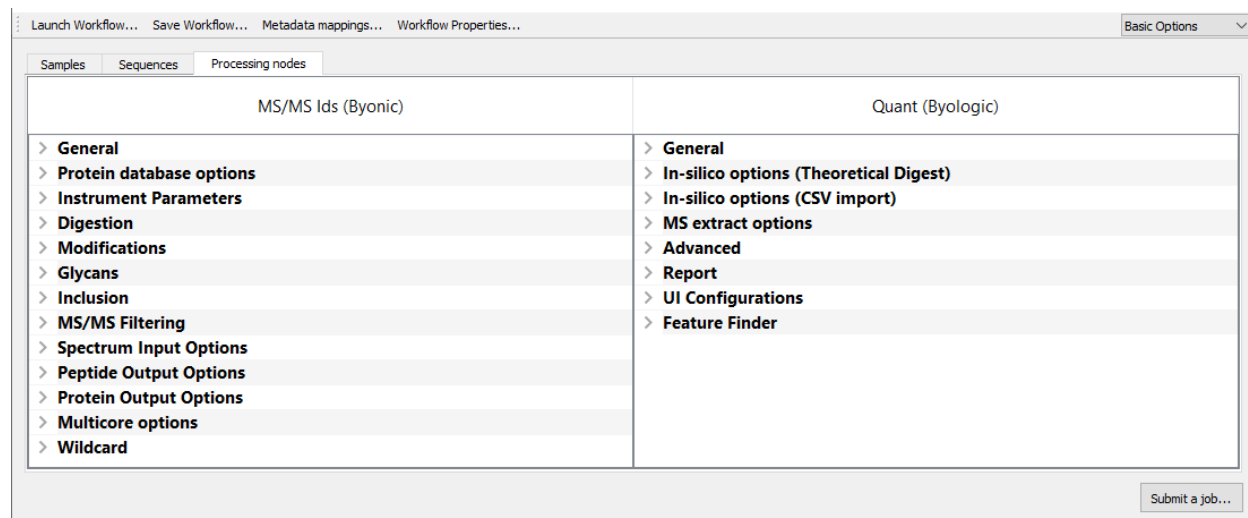



Figure 10: Processing nodes tabs contain specialized workflow parameters

Add a Report Template

If a report configuration file (`.rptc`) is not manually added by the user, the Client will use the default report for the broad workflow category the selected workflow belongs to (either Intact, Peptide, or Chromatogram Analysis). For instance, the HCP or S-S workflows would have the Blgc_PTM (Default) report template assigned if the user does not manually assign a specific report template from the server. To use a non-default report configuration, first upload the `*.rptc` file to the server. Report configuration files can be uploaded to the server using the steps outlined in the [Upload Files to Server](#) section. To assign the server report configuration, open **Report** in the **Processing nodes** tab, double-click in the **Report Configuration Path** cell and click the  button:

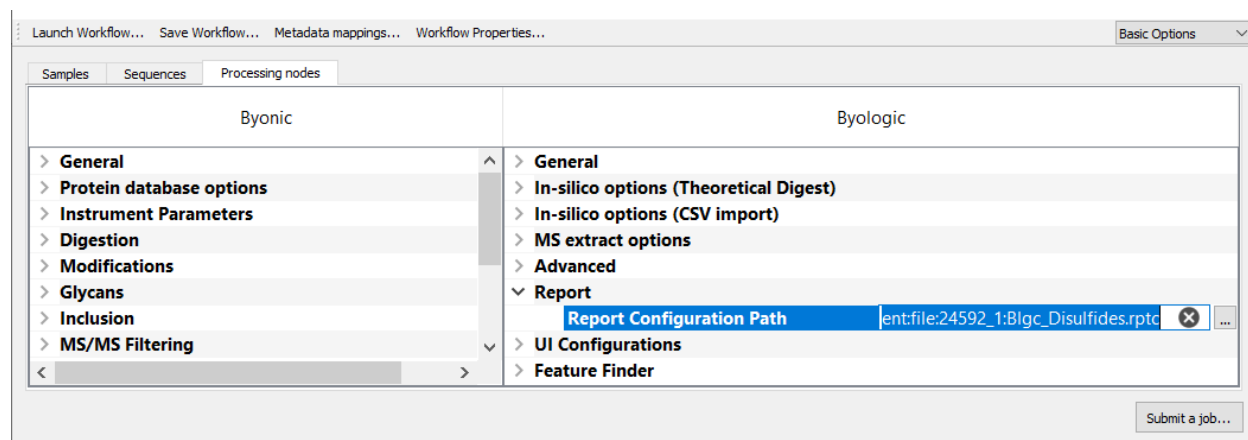


Figure 11: Assigning a report configuration from the server

Navigate to and select the configuration file on the server and click **Choose**. Note that report configurations (`.rptc`) can only be loaded from the server.

Save the Byosphere Workflow

Byosphere Byos Client workflows can be saved as *.wflw files, either locally or to the Byosphere server. To save the Byosphere Byos Client workflow click **Save Workflow** at the top and select the target folder to save the workflow in, then click **Save**.

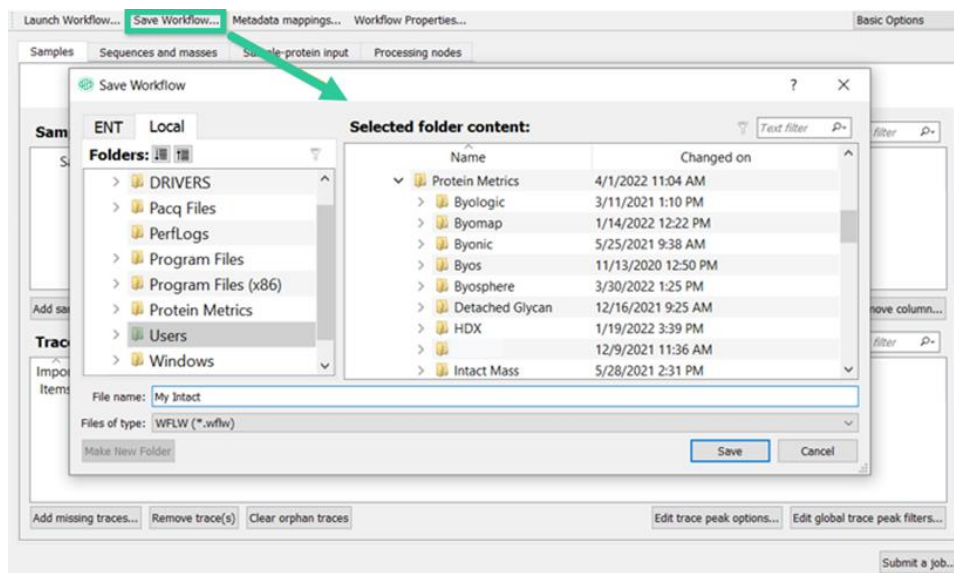


Figure 12: Save a Workflow

All references to files located on the Byosphere server, as well as loaded local file data, are retained. Saved workflow files can be opened from a local directory or the Byosphere server after they are uploaded.

Submit the Analysis

When all the desired files have been imported into the Byosphere Byos Client workflow, click **Submit a job** at the lower right. Enter the name of the analysis in the **File name** text box (the Protein Metrics file extension is displayed):

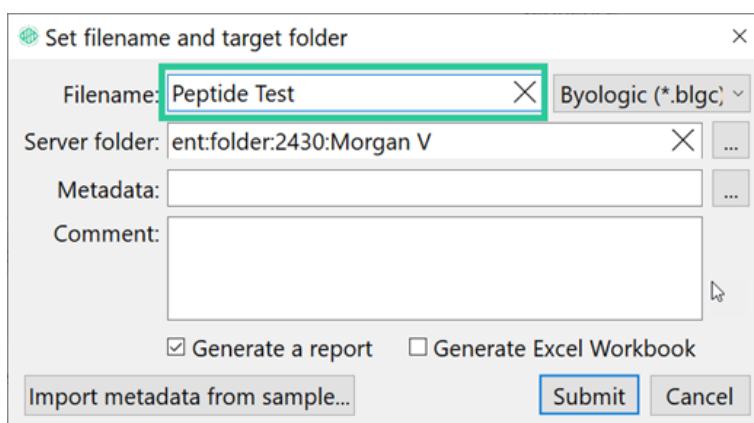


Figure 13: Enter file name for the analysis

To set a server destination folder, click the **...** button after the **Server folder** cell, and navigate to and select the Byosphere server destination folder:



Figure 14: Select destination server folder for the analysis

Click **Choose folder**. The **Server folder** cell is populated with the folder ID and name:

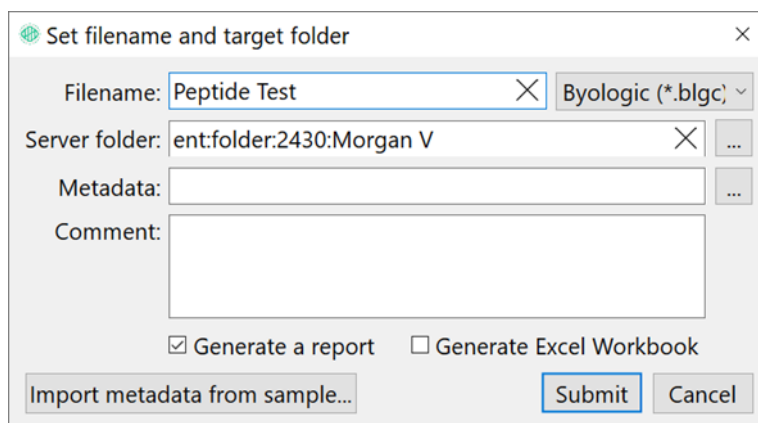


Figure 15: Analysis submit dialog with name and server folder added

Metadata

Metadata is information about the project file (e.g. Instrument, Project, Sample, Lot Number). To add metadata, click the **...** button at the end of the **Metadata** cell. The **Edit Metadata** dialog opens:

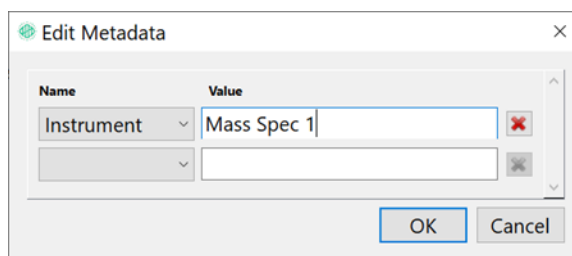


Figure 16: Adding metadata field values to the analysis

Add the desired metadata field names and values and click **OK**. The entered metadata is displayed in the analysis submit dialog:

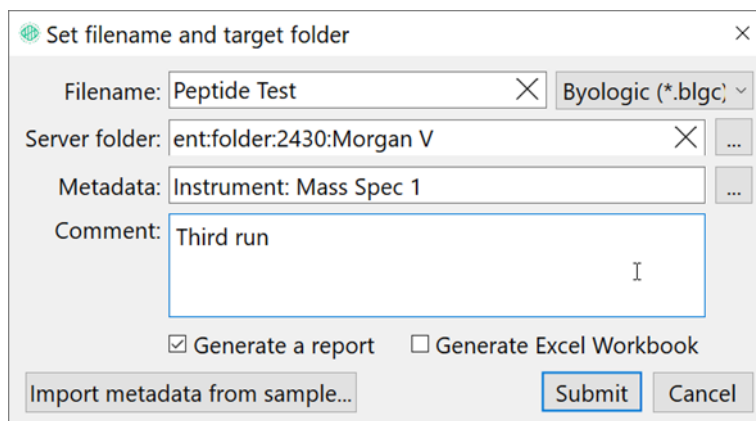


Figure 17: Completed analysis submit dialog

The addition of an analysis **Comment** is optional. To submit an analysis without generating a report, uncheck **Generate a report**.

If there is metadata associated with a sample file (e.g., metadata obtained through Data Uploader), it can be imported directly to the project. Click **Import metadata from sample**, select the sample containing the metadata and click **OK**:

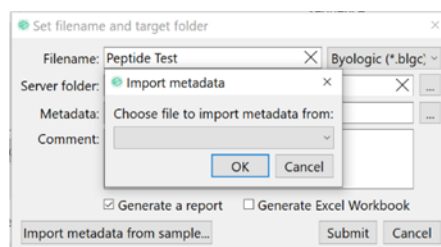


Figure 18: Importing metadata from a sample

Click **Submit a job** to begin the analysis. A dialog appears to notify that the analysis job submission was successful:

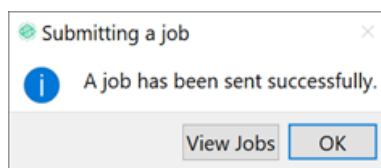
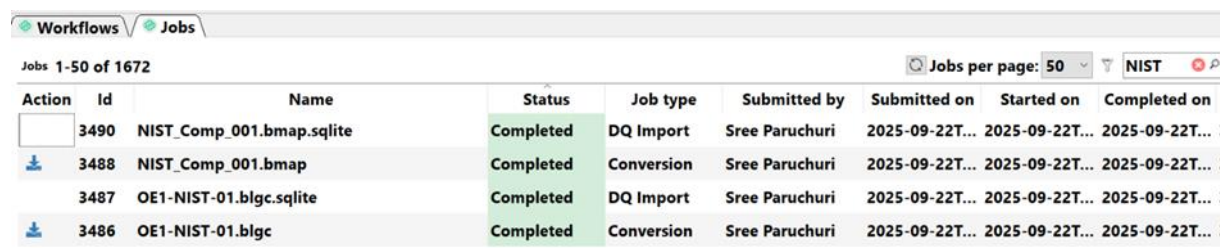


Figure 19: Successful job submit notification

The **View Jobs** button opens the **Jobs** tab, which is discussed next.

View the Analysis Job

Once an analysis has been submitted to the Byosphere server, the progress of the analysis can be followed in the **Jobs** tab:








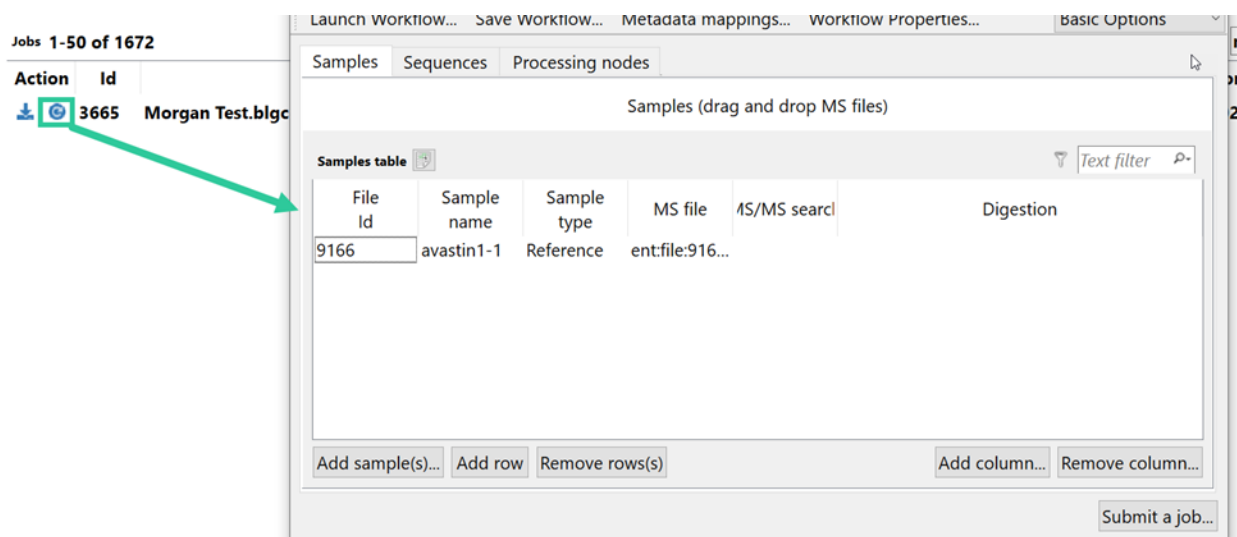
Action	Id	Name	Status	Job type	Submitted by	Submitted on	Started on	Completed on
	3490	NIST_Comp_001.bmap.sqlite	Completed	DQ Import	Sree Paruchuri	2025-09-22T...	2025-09-22T...	2025-09-22T...
	3488	NIST_Comp_001.bmap	Completed	Conversion	Sree Paruchuri	2025-09-22T...	2025-09-22T...	2025-09-22T...
	3487	OE1-NIST-01.blgc.sqlite	Completed	DQ Import	Sree Paruchuri	2025-09-22T...	2025-09-22T...	2025-09-22T...
	3486	OE1-NIST-01.blgc	Completed	Conversion	Sree Paruchuri	2025-09-22T...	2025-09-22T...	2025-09-22T...

Figure 20: Jobs tab



The Jobs tab displays information about the queued and running jobs for all Users, all completed and failed jobs submitted by that User, and all completed and failed jobs submitted by anyone to folders for which the User has privileges.

Job types include **Analysis**, **Report**, **Conversion**, **Auditlog**, and **Pacq**. Job details include file **Alias**, job **Status**, **Type** (either server Analysis or Report from an uploaded project) and **Submitted By**. The **Submitted On**, **Started On** and **Completed On** columns indicate how long a Job was in the queue and how long it took to run.

The first column represents the actions associated with Jobs. Click the  icon to cancel a running or queued job. Users can cancel their own jobs, while Super Users can cancel any jobs. Click the  icon to download a log file for a completed or failed job -- this information can be used to diagnose why a job failed. Click the  icon to rerun a job that has completed or failed. In the case of an Analysis job, the workflow that was submitted reopens, populated with the original data:




Jobs 1-50 of 1672

Action	Id	Name
 	3665	Morgan Test.blgc

Launch Workflow... Save Workflow... Metadata mappings... Workflow Properties... Basic Options

Samples Sequences Processing nodes

Samples (drag and drop MS files)

Samples table 

File Id	Sample name	Sample type	MS file	4S/MS search	Digestion
9166	avastin1-1	Reference	ent:file:916...		

Add sample(s)... Add row Remove row(s) Add column... Remove column...

Submit a job...

Figure 21: Rerunning an Analysis job

In the workflow, a User can correct errors for a failed analysis, or create a variation of a completed analysis. To rerun either kind of analysis, click **Submit a job**, enter the analysis file name, select the server folder to save to, click **Choose**, and finally click **Submit a job**.

When an analysis job has completed, the Byosphere server will send an email to the User's email account, provided that the System Admin has set up email notifications. Otherwise, analysis jobs can be viewed in the Web Client or Jobs tab once completed.

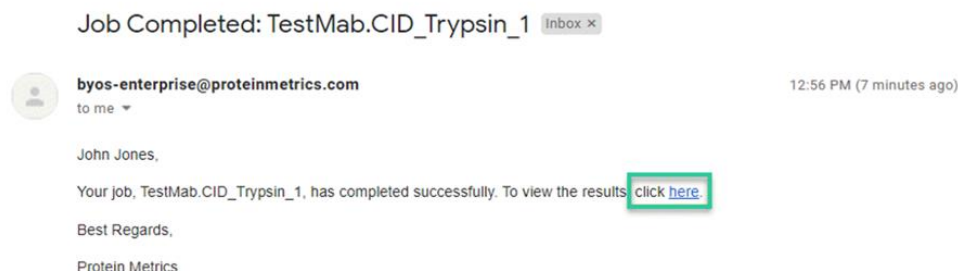




Figure 22: Job Completed notification by email

The link embedded in the email (shown above) opens the Byosphere Web Client to the search result for the completed analysis.

In the event of a failed job, the email will note the Job ID and the link will bring the User to the Jobs page of the Byosphere Web Client, where the User can download the log file.

View a Report within the Web Client

When the Analysis Job is complete, the generated web report can be viewed in the Byosphere Web Client. From the email link, open the analysis search result (see Figure above) and click the  icon. Alternatively, select the folder that contains the file and click the  icon for the project file. From the **View Report** dialog, click **View**. A web report much like the desktop report opens in another web browser tab:

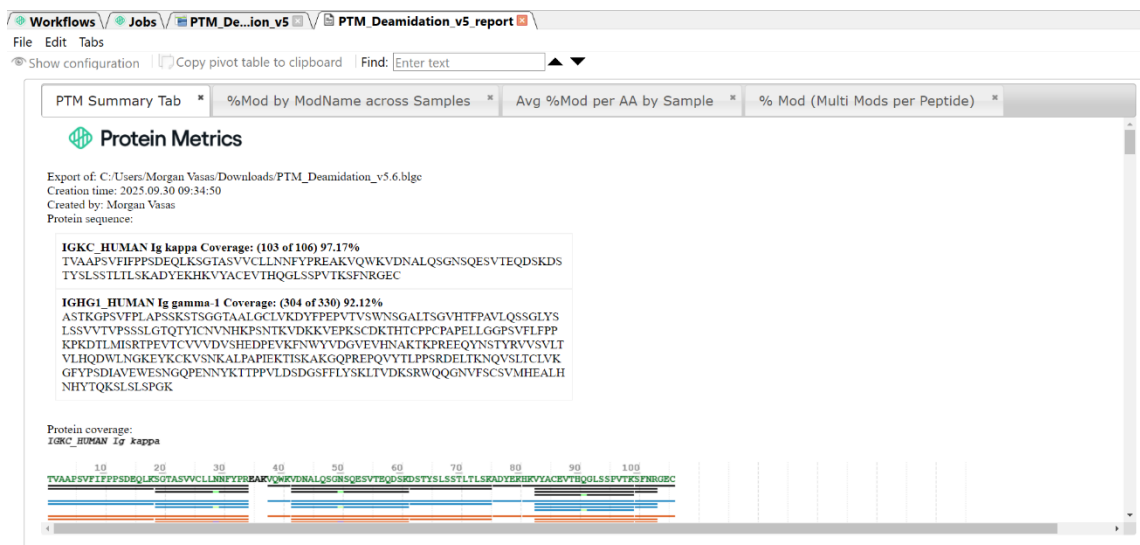


Figure 23: Analysis web report

For more details about analysis web reports, see the [View or Download a Web Report](#) section.

Reprocess an Analysis Project

Users may wish to reprocess an analysis project in the Byosphere Byos Client. The menu item **File > Open Project** can open projects on the desktop from the server or locally.

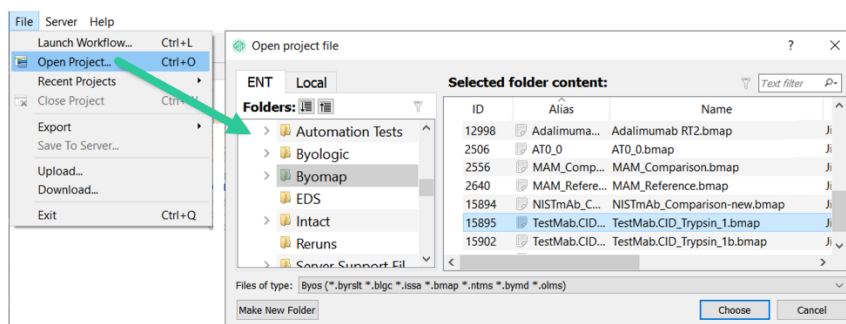


Figure 24: File > Open Project

When projects are opened from the server for the first time, Users are notified if any potentially needed resources (sample files, report configurations, FASTA files, etc.) are missing from their local environment:

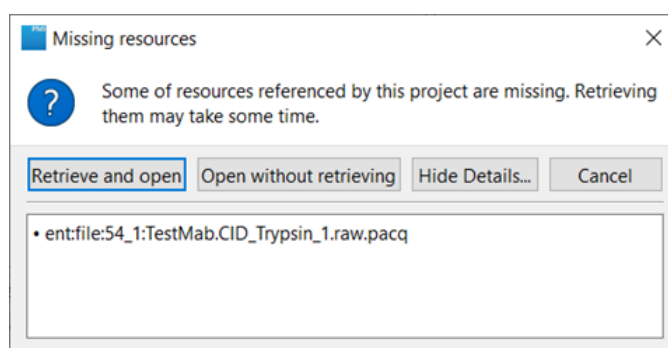


Figure 25: Opening projects from the server includes options to download support files

Click **Retrieve and open** to download the missing resources before the project is opened. Click **Open without retrieving** to open the project directly without downloading any missing resources. Missing resources can still be downloaded later with **File > Retrieve missing resources**.

Note: **File > Open Project** is recommended to open server projects because the local copy of the project maintains an association with the server project. This association is broken for local project files obtained from **File > Download**.

When the project file and any requested resources are downloaded, the project and its report will automatically open in Byosphere Byos Client:

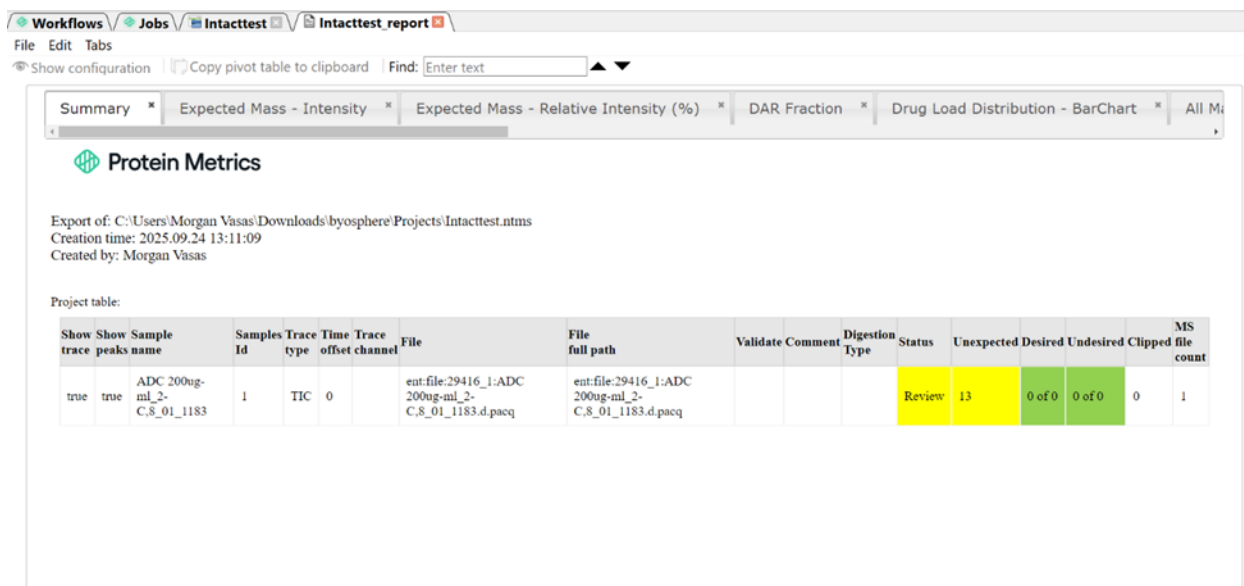
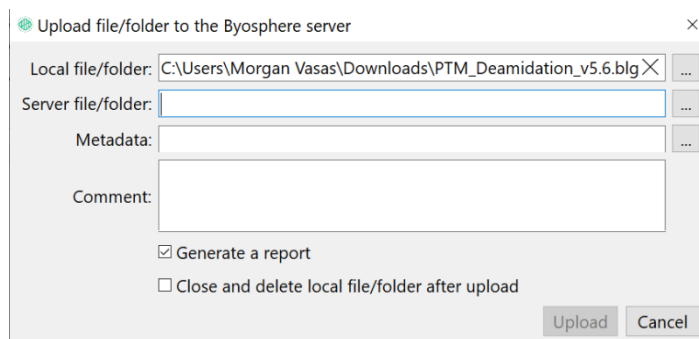


Figure 26: Protein Metrics project and report automatically opened in Byosphere Byos Client

Save the Updated Project to the Server

After the project is reprocessed, the project can be saved back to the Byosphere server. Project files can be saved as new versions of the original server project (where the original file version is preserved) or uploaded to the server as new files. To save the project as a new version of the server project, choose **File > Save to Server**:



Upload file/folder to the Byosphere server

Local file/folder: C:\Users\Morgan Vasas\Downloads\PTM_Deamidation_v5.6.blg

Server file/folder:

Metadata:

Comment:

☒ Generate a report


☐ Close and delete local file/folder after upload

Upload Cancel

Figure 27: Upload dialog opened by File > Save to Server

The upload will be a new version of the project file. The addition of analysis **Metadata** (see the [Metadata](#) section) or a **Comment** is optional. Click **Upload** to save the project as a new version.

To upload the project file as a new server project, choose **File > Upload**. If the project was downloaded from the server in an open session, the **Local file** and **Server file** values will be pre-populated.

1. To save the project as a new server file, the server destination must be changed from a file to a folder. To change the server destination, click the  button following **Server file/folder**, navigate to and select the sample file folder on the left and click **Choose**.
2. Optionally, add **Metadata** and/or a **Comment**.
3. Check **Generate a report** to store a web report with the uploaded project.

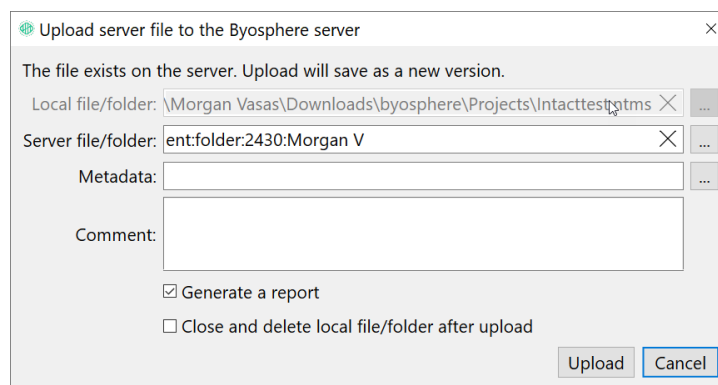


Figure 28: Uploading an edited project as a new server file

4. Click **Upload**. After the upload completes, a message confirms that a report job has been submitted to the server. After the report generation completes, an email message is sent to the User with a link to the project file.



View a Report Job

If a Project is downloaded from the Server, edited, and is reuploaded with **Generate a Report** checked, the submitted report job is displayed in the **Jobs** tab:

Jobs 251-300 of 1695 Jobs per page: 50

Action	Id	Name	Status	Job type	Submitted by	Submitted on	Started on	Completed on
 	2705	6490_ADC.ntms	Completed	Report	R	2025-09-11T12...	2025-09-11T12...	2025-09-11T12... 3

Figure 29: Jobs tab with a running Report job

As with analysis jobs, click the  icon to download a log file for a completed or failed report job. Click the  icon to rerun a report job that has completed or failed. A dialog opens prompting for a server report template file:

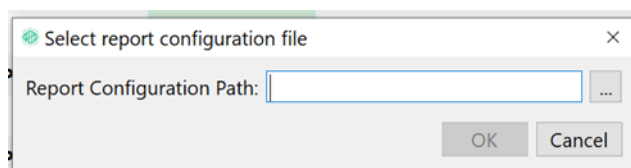



Figure 30: Select a report configuration for a rerun Report Job

To change the report template, click the  button, navigate to and select the *.rptc file on the server, and click **Choose**. Click **OK** and a new version of the project will be generated using the report template chosen.

Byosphere Web Client

The Byosphere Web Client is a web-based portal to add, view and manage files, folders, and jobs. The Web Client requires the same URL and login information as the Byosphere Byos Client. The Web Client consists of five distinct pages or work areas: **Browse**, **Search**, **Jobs**, **Notifications**, and **VM**, which can be accessed by the icons that follow the Protein Metrics Byosphere logo at the top left of the webpage.

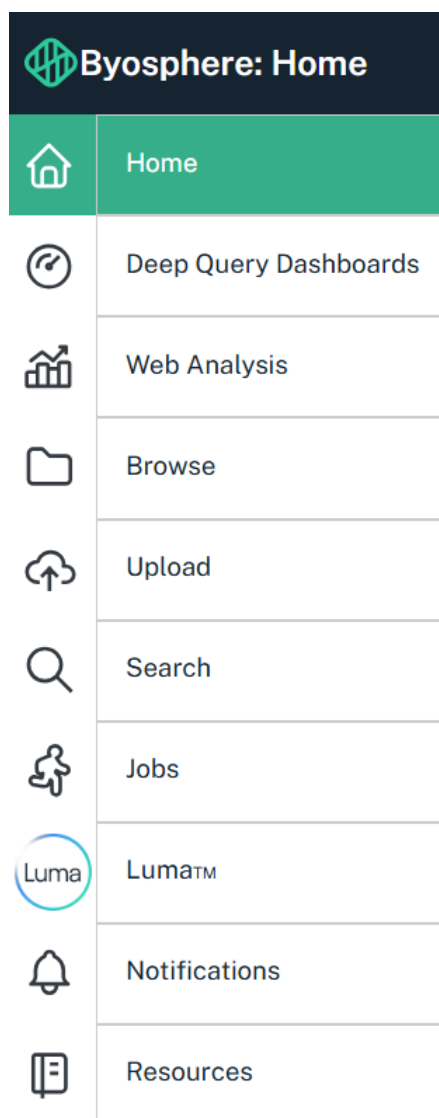













Figure 31: Byosphere navigation panel

Each Byosphere Web page represents a set of related functions:

- In the **Home**  page, users can view the eight most recent files that they have interacted with, as well as all associated actions for these files. The page names on the navigation panel appear in full from the homepage.
- In the **Deep Query Dashboards**  page, users can access the **Deep Query** application, which allows a user to collate data from multiple Byosphere Byos projects and/or Web Analyses into a Dashboard to provide aggregate information. The user can develop multiple outputs from data, including Dashboards, status indicators, listings, and statistical analyses. For more information, see the **Byosphere Deep Query Dashboards Manual**.
- In the **Web Analysis**  page, users can access **Web Analysis**, an application embedded within the Byosphere enterprise server that improves customer experience by enabling interactive and iterative computations and the creation of analyses directly within Byosphere. For more information, see the **Byosphere Intact Web Analysis Manual** and the **Byosphere Peptide Web Analysis Manual**.

- In the **Browse**  page, users can access and manage files and folders. Designated users can create folders, upload, or download files and edit, move, and delete files and or folders. Other designated users can view and download these files and folders. Under **File History**, older versions can be viewed and downloaded. Reports can be generated from project files.
- In the **Upload**  page, users can upload standard files as well as MS files by clicking the dropzone, which will launch the File Explorer, or dragging MS files and folders (.d and .raw) from the File Explorer and dropping them directly into the zone.
- In the **Search**  page, users search for files and folders, according to their assigned privileges, and filter by metadata. Users can access or edit records from the search results list directly.
- In the **Jobs**  page, users can view information about Analysis Server jobs that they or other users submitted, according to their assigned privileges. Users can view job status and open job log files. Note that Web Analysis tasks are not included in the Jobs page.
- In the **Luma™**  page, users can navigate to the main page of the Dotmatics Luma Platform.
- In the **Notifications**  page, users can view notifications of their completed jobs with links to the job results.
- In the **Virtual Client**  page (**Note:** only visible for users who have the Virtual Client configured), users can open a hosted instance of Byosphere Byos in the Web Client for very fast large project and sample downloads. Byosphere Virtual Client needs to be configured on the Byosphere server to enable this feature. For more information, see the [Virtual Client](#) section of this manual or the **Byosphere Virtual Client Configuration Manual**.
- In the **Resources**  page, the user has access to useful links that provide more information about tutorials, Protein Metrics resources, and the Knowledge Base.

Manage Web Folders

Byosphere server folders appear as a tree in the left panel of the Browse page. Folder Editors will see three icons indicating different actions that can be taken for the selected folder.

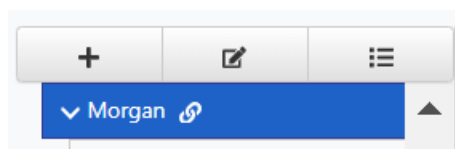


Figure 32: Folder tree with Folder Editor actions above

Users who are Folder Editors for the selected folder can perform the following options:

Add a Folder

Click the **+** button to add a folder:

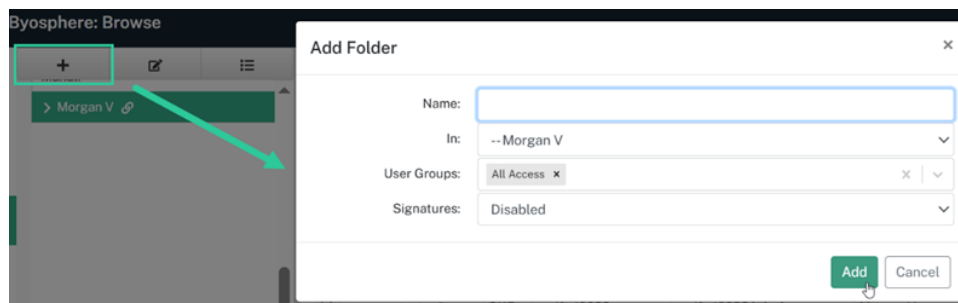


Figure 33: Add Folder dialog

- **Name** is the unique name for the folder.
- **In** sets the parent folder that contains the new folder. Super Users can add folders to any parent folder on the server, as well as **<root>**, which represents the root level. A standard User will see only those folders that they have privileges for, which does not include the root level.
- **User Groups** are created by the Administrator and they contain a list of Users with their folder and file privileges. To associate User Groups to the folder, click in the User Groups cell:

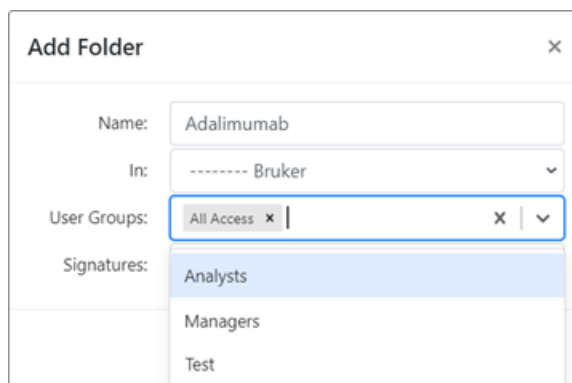


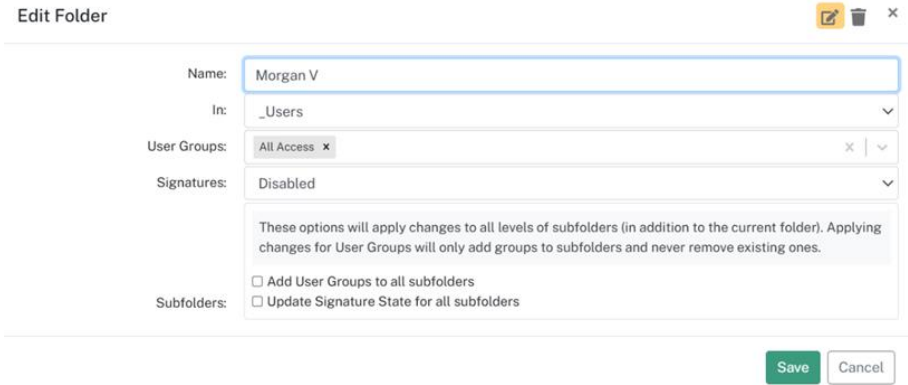
Figure 34: The User Group dropdown

- **Signatures** enabled signing for project files in that folder if Byosphere uses the Regulatory Module. When a folder is enabled for signatures, an asterisk (*) appears after the folder name.

Click **Add** to create the folder. An add confirmation message is displayed, and the folder tree is updated with the new folder in the left pane.

Edit or Delete a Folder

Click the  button to edit the selected folder:



Edit Folder

Name:

In:

User Groups:

Signatures:

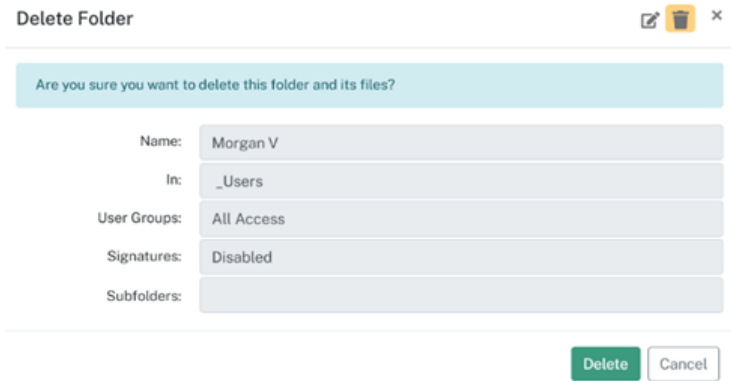
Subfolders: ☐ Add User Groups to all subfolders
☐ Update Signature State for all subfolders

These options will apply changes to all levels of subfolders (in addition to the current folder). Applying changes for User Groups will only add groups to subfolders and never remove existing ones.

Save **Cancel**

Figure 35: Edit Folder dialog

The **Edit Folder** dialog also allows the User to delete the selected folder. Click the  button at top right (see figure above). The dialog changes to **Delete Folder**:



Delete Folder

Are you sure you want to delete this folder and its files?

Name:

In:

User Groups:

Signatures:


Subfolders:

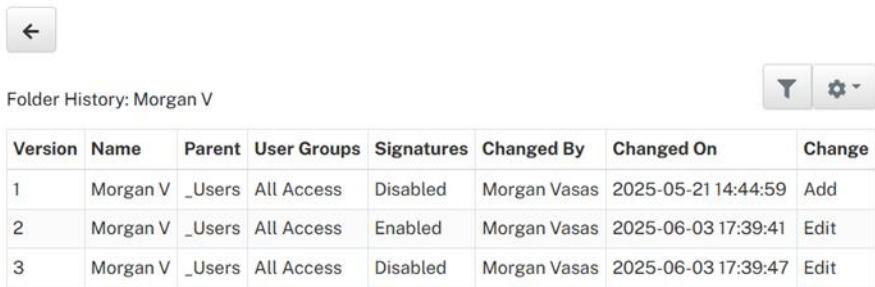
Delete **Cancel**

Figure 36: Delete Folder dialog opened from Edit Folder

Click **Delete** to remove the folder and its file contents. Note that the folder is not completely deleted. The server Administrator can restore or permanently delete the folder in the Byosphere Admin Web Client.

View Folder History, Copy Folder Link


Click the  button for a selected folder to view the Folder History:




Folder History: Morgan V

Version	Name	Parent	User Groups	Signatures	Changed By	Changed On	Change
1	Morgan V	_Users	All Access	Disabled	Morgan Vasas	2025-05-21 14:44:59	Add
2	Morgan V	_Users	All Access	Enabled	Morgan Vasas	2025-06-03 17:39:41	Edit
3	Morgan V	_Users	All Access	Disabled	Morgan Vasas	2025-06-03 17:39:47	Edit

Figure 37: Folder History

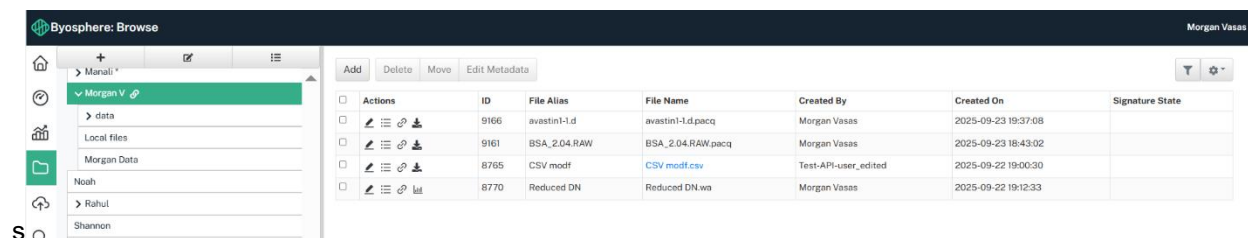
Click the  button at top left to return to the File table view.

Note: if the User is not a Folder Editor for the selected folder, no action buttons appear above the folder tree:

The link icon  after the folder name (as shown above) copies the folder address so that it can be shared with other Users who are members of the folder's User Group.

Manage Web Files

When a folder is selected, the files contained in that folder are displayed in a table:



Byosphere: Browse

Morgan V

data

Local files

Morgan Data

Noah

Rahul

Shannon

Actions













	ID	File Alias	File Name	Created By	Created On	Signature State
  	9166	avastin-1.d	avastin-1.d.pacq	Morgan Vasas	2025-09-23 19:37:08	
  	9161	BSA_2.04.RAW	BSA_2.04.RAW.pacq	Morgan Vasas	2025-09-23 18:43:02	
  	8765	CSV modif	CSV modif.csv	Test-API-user_edited	2025-09-22 19:00:30	
  	8770	Reduced DN	Reduced DN.wa	Morgan Vasas	2025-09-22 19:12:33	

Figure 38: Files in the selected folder

If the User is a File Editor for the selected folder, action buttons appear above the File Table:



Figure 39: Actions above files in a folder where the User is a Folder Editor

Note that Users who are not file editors do not see the file action buttons.

In addition to these action buttons, files have a column of action icons which can be applied to that file:

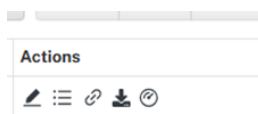
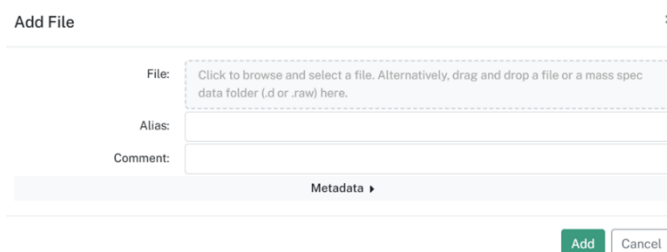


Figure 40: File action icons before files

Add a File

The **Add** button above the File Table is used to upload a new file to the selected folder:



Add File

File:

Alias:

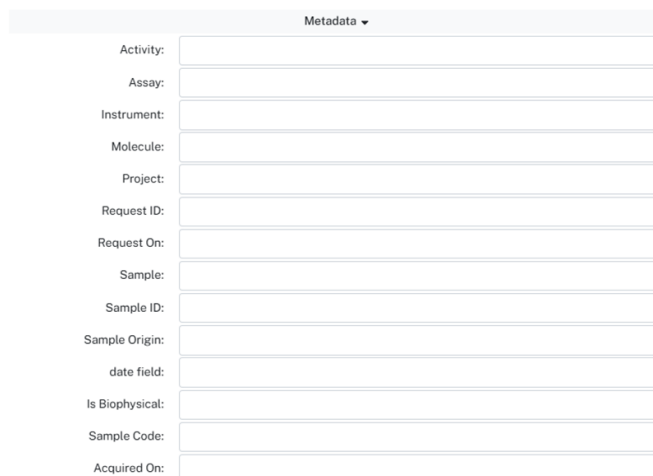
Comment:

Metadata ▶

Add Cancel

Figure 41: Add File dialog

Click the **Browse** button to add a local file. The **Alias** value is populated with the file name without extension, which can be edited. A **Comment** is optional. Click the right arrow following **Metadata** to add values to Metadata fields:



Metadata ▼	
Activity:	
Assay:	
Instrument:	
Molecule:	
Project:	
Request ID:	
Request On:	
Sample:	
Sample ID:	
Sample Origin:	
date field:	
Is Biophysical:	
Sample Code:	
Acquired On:	

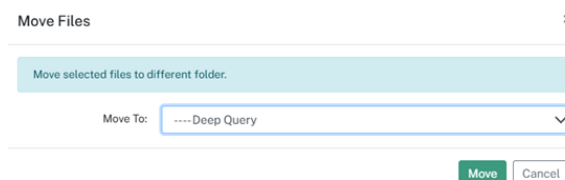
Figure 42: Some of the available Metadata fields from the File uploader

Click **Add** to upload the file. **Note:** The Byosphere Byos Client should be used to upload MS files, project files with generated web reports and folders of files.

Delete or Move Checked Files

The **Delete** button deletes files that are checked in the box to their left.

The **Move** button moves files that are checked in the box to their left to a new parent folder:



Move Files


Move selected files to different folder.

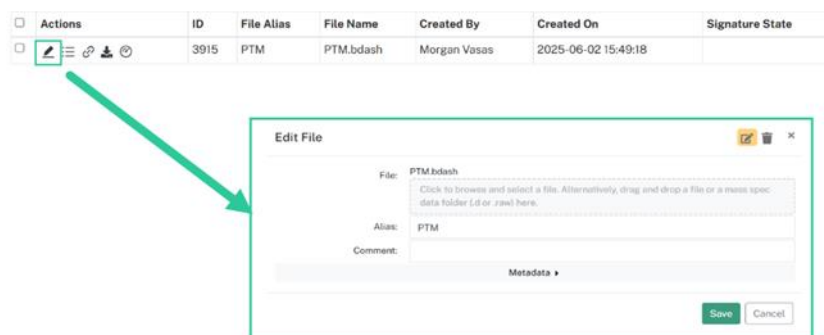
Move To: ---- Deep Query


Move Cancel

Figure 43: Move Files dialog

Edit or Delete a File

The  button to the left of the file allows the User to replace the file from a local source or edit the **Alias** value:



Actions	ID	File Alias	File Name	Created By	Created On	Signature State
	3915	PTM	PTM.bdash	Morgan Vasas	2025-06-02 15:49:18	

Edit File

File: PTM.bdash

Click to browse and select a file. Alternatively, drag and drop a file or a mass spec data folder (.d or .raw) here.


Alias: PTM

Comment:

Metadata ▼

Save Cancel

Figure 44: Edit File dialog

The **Edit File** dialog also allows the User to delete that file. Click the  button at top right (see figure above). The dialog changes to **Delete File**:

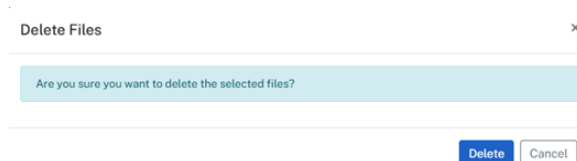


Figure 45: Delete File dialog opened from Edit File

Click **Delete** to remove the file. Note that the file is not completely deleted. The server Administrator can restore or permanently delete the file in the Byosphere Admin Web Client.

Sign a File

When the Regulatory mode is enabled on the Byosphere system, Protein Metrics project files with web reports can be signed. Folders must have **Signatures** enabled as part of their properties for their projects to be signed. The names of a Signature-enabled folder is appended with an asterisk (*):

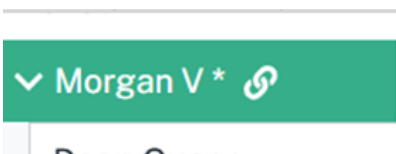




Figure 46: Names of folders that are Signature-enabled are marked with (*)

To sign a project with a report (that is, a project which displays the  icon), click the  icon to edit the file:

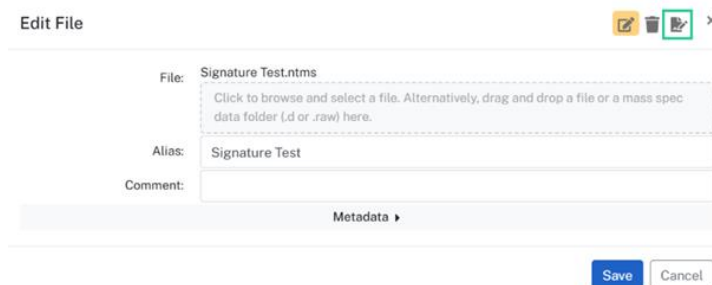



Figure 47: The Sign icon appears at top right

Click the  icon at top right to open the **Sign File** dialog:

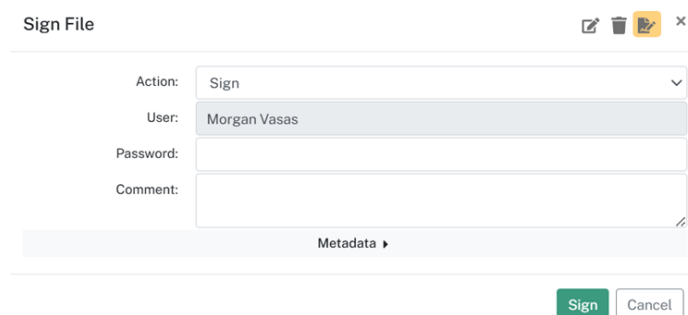



Figure 48: Sign File dialog

Enter the Byosphere **Password**, add a **Comment** as needed and click **Sign**.

File History, Link and Download

The  button at the left of the file opens its **File History**, which shows details about each file version:

Download File History Report for version 3 








Action	Version	Folder Name	File Alias	File Name	Changed By	Changed On	Change	Comment	Signature State
	1	_Users	DN29	DN29.fasta	Morgan Vasas	2025-06-03 20:05:39	Upload		
	2	_Users	DN29	DN29.fasta	Morgan Vasas	2025-06-03 20:05:39	Edit Metadata		
	3	Morgan V	DN29	DN29.fasta	Morgan Vasas	2025-06-03 20:05:50	Move		

Figure 49: File History

The **Action** column displays the available actions for the file versions. The  icon is a download function, displayed for every server analysis and file upload. This enables the User to download and view a file version that has been since replaced by another version. The  icon opens a report for that version, as described in the [View or Download a Web Report](#) section below. The  icon displays the source files used to generate an analysis, as described in the [Locate the Sample Files on the Server](#) section. The  button at top left returns the User to the File table.

The link icon  to the left of a file copies the file address so it can be shared with other Users who are members of the file folder's User Group.

The  button to the left of the file name downloads the file to the default download directory for the web browser. **Note:** the latest version of the file is downloaded; to obtain a copy of an earlier file version, download that version from the File History.


Display Common Files

Many common file types that are stored on the Byosphere server can be displayed directly in the Byosphere Web Client window from the Browser Files table and Search Results table. These file types include text files (*.csv, *.log, *.txt), *.json, *.pdf, image, video and audio files. If the file type is supported for opening in the Web Client, the file name displays a blue web link:

Search: [Open](#) [Save](#) [Clear](#) [Switch to Advanced](#) [Export Results to CSV](#)

☐ Edit batch

No filters available.

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Actions	Folder	ID	File Alias	File Name	File Size	Created By	Created On	Signature State
 	GlycanDatabase	9483	N-glycan 50 common biantennary	N-glycan 50 common biantennary.txt	2017	Sweta Agrawal	2025-06-25 13:08:37	
 	GlycanDatabase	37151	N-glycan 50 common biantennary	N-glycan 50 common biantennary.txt	2017	Adrianna Urbanska	2025-07-18 12:07:49	
 	GlycanDatabase	40326	N-glycan 50 common biantennary	N-glycan 50 common biantennary.txt	2017	Devesh Joshi	2025-08-01 08:57:10	

Figure 50: Files that can be displayed in the Web Client show web links in blue

Click the blue file name and the contents are displayed in an embedded window in the Web Client:

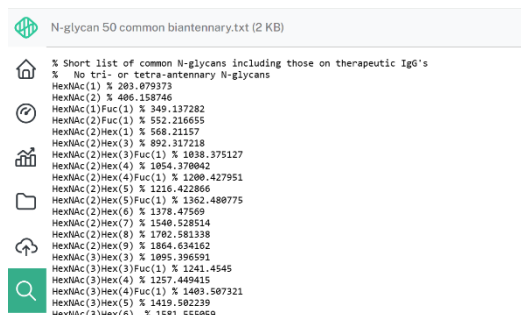



Figure 51: Server *.txt file displayed in the Web Client

Click the  icon at top right to download the file and click **x** to close the embedded display and return to the original screen.

Properly formatted *.csv as well as *.pI and *.arw files can be plotted as spectra/traces. To do so, click the blue file name of the file to display it as a text file. Then, check **View as spectrum** or **View Trace** at the top right to plot the data:

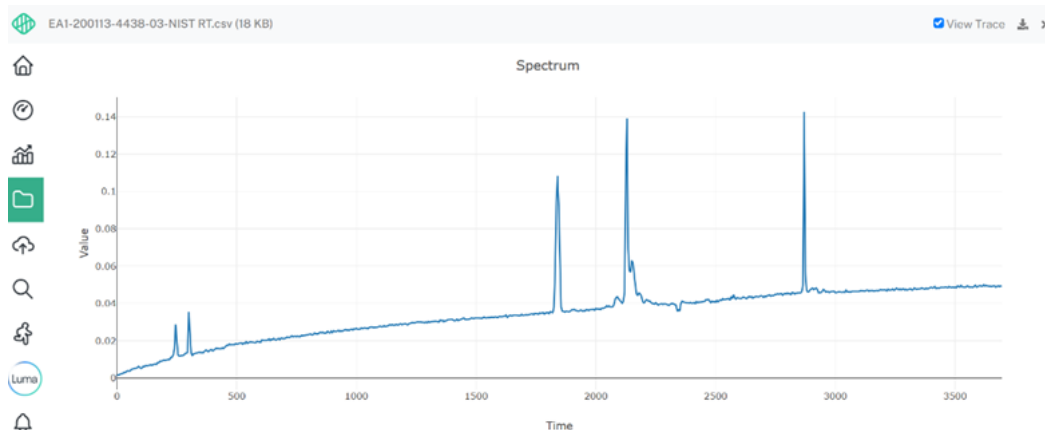


Figure 52: Server *.csv file displayed as a plot in the Web Client

View or Download a Web Report

Web reports closely resemble Byos project reports generated on the desktop. All Users who can view project files can also view web reports for those files.

Click the  button to the left of a project file to open the **Web Report** dialog:

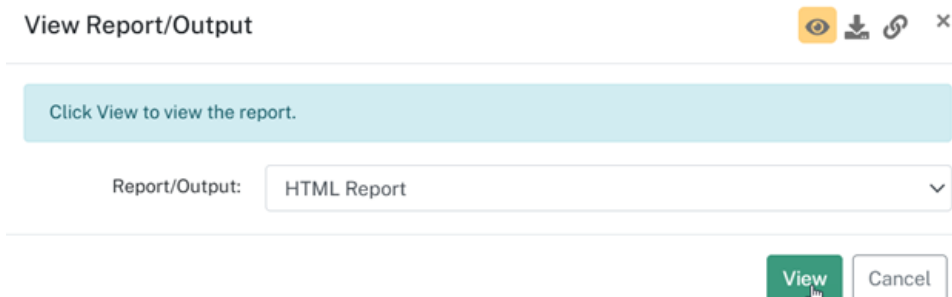


Figure 53: View Report dialog

Click **View** and the project's web report opens in an embedded window:

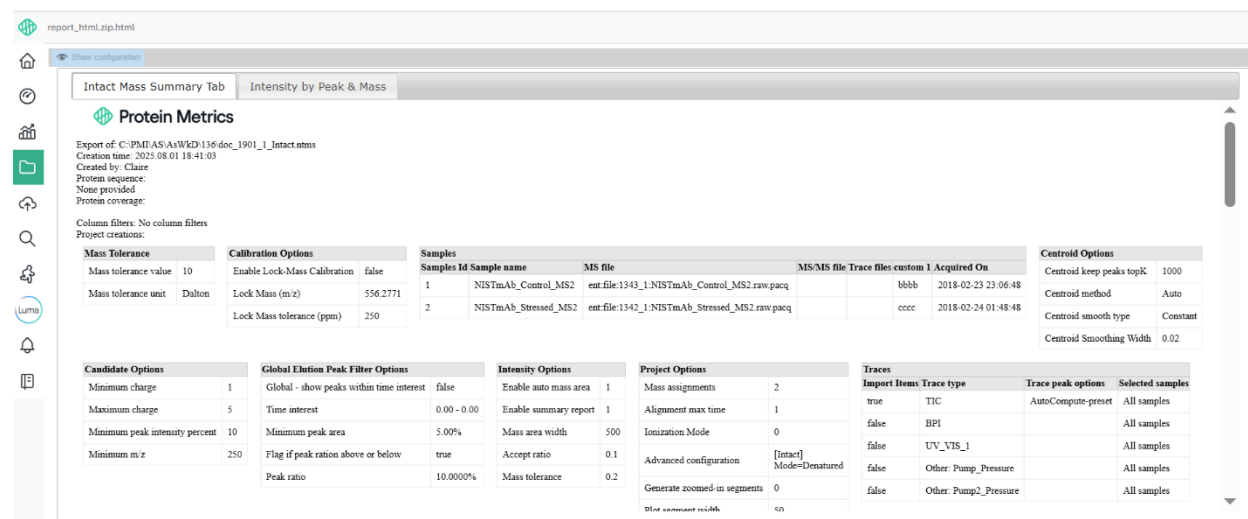


Figure 54: Example web report

The web page that displays the report contains sub-tabs corresponding to the report template (*.rptc file) assigned to the workflow when the project was generated or uploaded through the Byosphere Byos Client. To close the embedded report, click the **X** at top right and the Web Client returns to the original window.

To display the fields available for the project, select **Show Configuration** above the tabs:

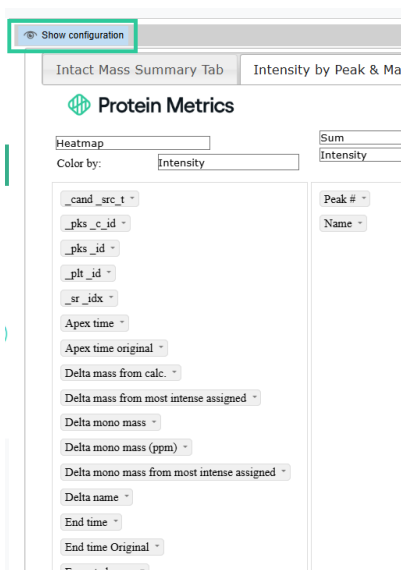





Figure 55: Web report with Show Configuration selected

When Show Configuration is enabled, pivot table displays can be edited and filtered as they are in Byosphere desktop reports.

Note: Reports viewed from a project in the File table are from the last version of that project. To view reports for previous versions of that project, open the File History.

To copy a link to the report to share with other Users who have access to that project, click the  button at top right. The URL for the report is copied to the clipboard.

To download a web report, click the  button for the project to open the View Report dialog (see [Figure 71](#)) and then click the  button at the top right. The dialog changes to **Download Report**:

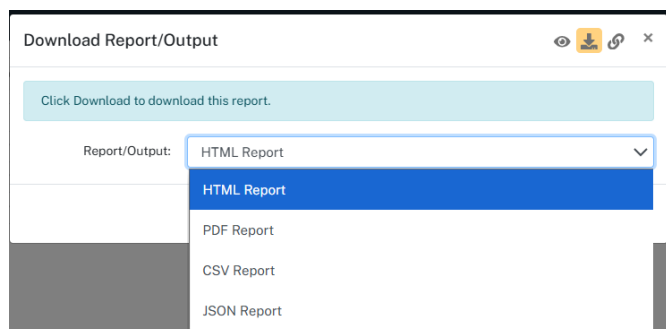


Figure 56: Download Report dialog

Select report type and click **Download** to export the report to the web browser's default download directory. The CSV Report option downloads a zipped file containing a *.csv file for each table tab and a *.csv file for the flat table for the primary table (for example, Elution peaks or Peptides).

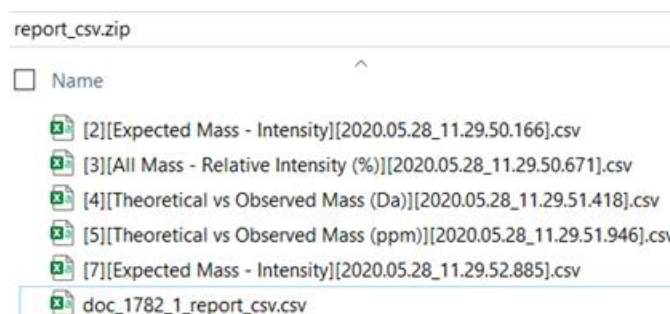


Figure 57: Contents of an example CSV Report zip file

The PDF Report option downloads a single, multi-page pdf file for the entire report:

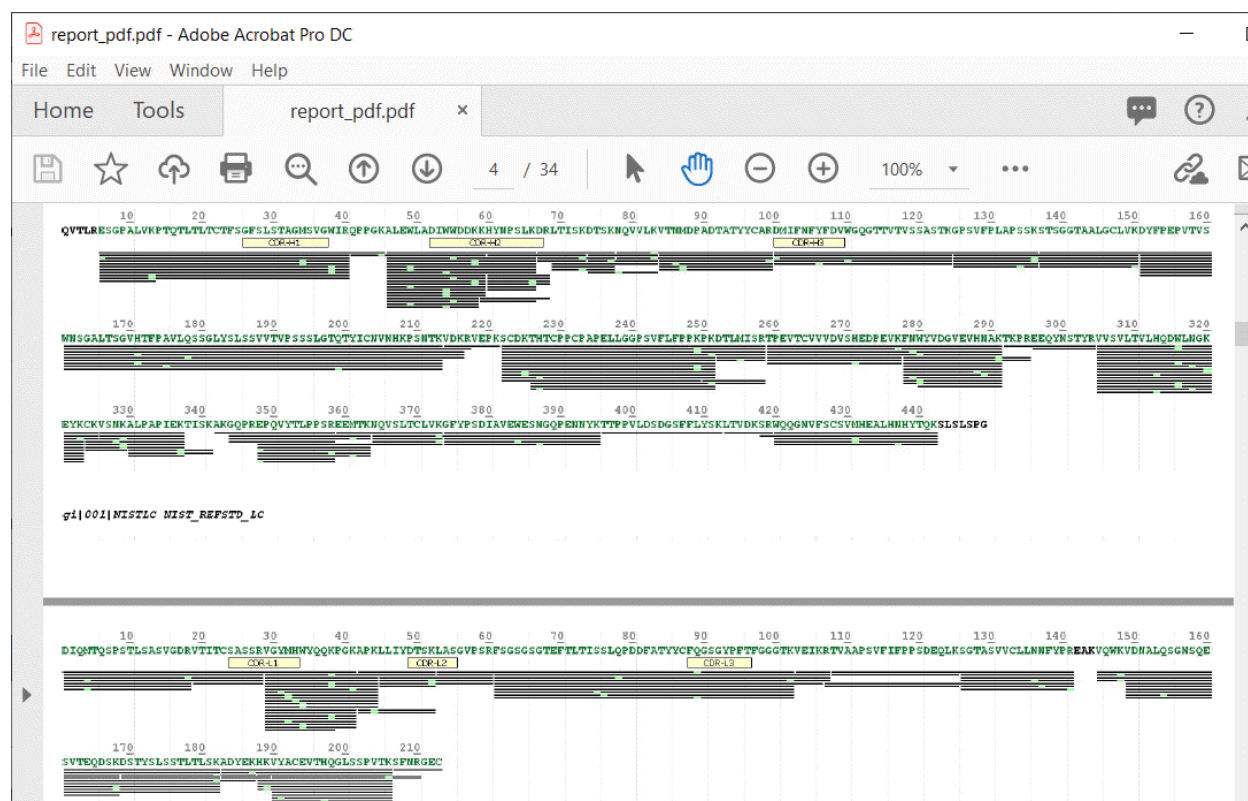




Figure 58: PDF report


Search for Files

The **Search**  page filters all files and folders that the User has privileges to see using an entered search string. To open the Search page, click  after the Byosphere logo. The Search page opens in the Basic Search mode with a search entry box, and additional options to open a saved search query, save a search query, clear the search query, or switch to Advanced Search mode:

Search: [Open](#) [Save](#) [Clear](#) [Switch to Advanced](#) [Export Results to CSV](#)

☐ Edit batch

Figure 59: Basic search options

In a Basic Search, the entered text string is searched across all the available fields in the File and Folder tables. To search for a text string, enter the string in the box and click the  button to the left of the string. The file results appear below the search entry box with optional Metadata filters to the left:

Search Morgan

☐ Edit batch

No filters available.

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




Actions	Folder	ID	File Alias	File Name	File Size	Created By	Created On	Sig Str
  	Deep Query	3915	PTM	PTM.bdash	299	Morgan Vasas	2025-06-02 15:49:18	
  	General Byosphere	4120	EA1-200113-4438-03-NIST RT	EA1-200113-4438-03-NIST RT.csv	18249	Morgan Vasas	2025-06-03 19:58:43	
  	General Byosphere	4245	NIST_byos_001	NIST_byos_001.blgc	58482688	Morgan Vasas	2025-06-04 20:33:35	


Figure 60: Search results of all records containing the entered string


The search will find files with values in any of the above columns that match the string. If the string matches a folder name, all files from that folder are displayed.


To filter the search results by available Metadata field values, check all values below the fields that apply. Only those records that match each of the conditions are displayed in the table:


Clear


Acquired On 


☐ 2018-02-23 23:06:48 


☐ 2018-02-24 01:48:48 


☐ 2018-02-27 12:35:44 


☐ 2018-02-27 15:17:36 


☐ 2023-06-26 16:13:54 


☐ 2025-04-15 12:00:00 


Assay 


☐ Example Assay 1 

☐ Example Assay 2 

☐ Example MetaData for Assay Field 

Instrument 

☐ 10136 Peptide 

☐ Custom Peptide 


☐ Guitar AA 

Figure 61: Filtering search results by Metadata values

To search by file ID, enter the text “file:” before the ID number:




Search: [Open](#) [Save](#) [Clear](#) [Switch to Advanced](#) [Export Results to CSV](#)

Search

☐ Edit batch

No filters available.

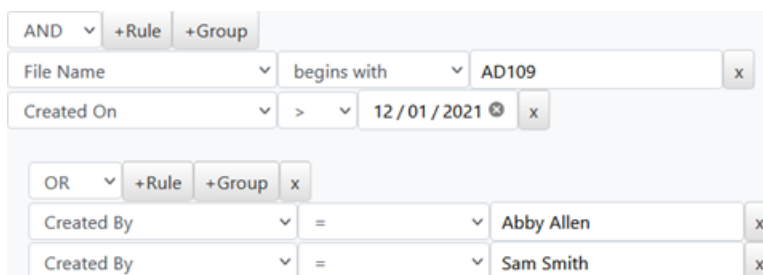
1-1 of 1 50

Actions	Folder	ID	File Alias	File Name	File Size	Created By	Created On	Signature State
  	Morgan V	3914	PTM Project	PTM Project.bdash	68588	Morgan Vasas	2025-06-02 15:23:51	

1-1 of 1

Figure 62: Search by File ID

The Advanced Search mode allow Users to search values by specific fields using a variety of operators, Boolean operators, and query groups:



AND ▾ +Rule +Group

File Name ▾ begins with ▾ AD109 x

Created On ▾ > ▾ 12/01/2021 x

OR ▾ +Rule +Group x

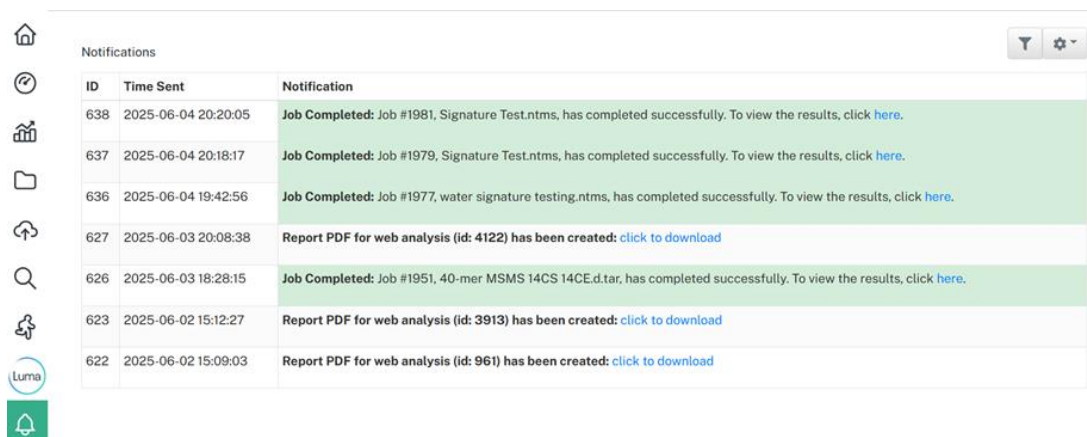
Created By ▾ = ▾ Abby Allen x

Created By ▾ = ▾ Sam Smith x

Figure 63: An example of an Advanced Search


View Jobs


The **Jobs** page displays the status of the server analysis and web report Job queue, analogous to the Byosphere Byos Client **Jobs** tab:




ID	Time Sent	Notification
638	2025-06-04 20:20:05	Job Completed: Job #1981, Signature Test.ntms, has completed successfully. To view the results, click here .
637	2025-06-04 20:18:17	Job Completed: Job #1979, Signature Test.ntms, has completed successfully. To view the results, click here .
636	2025-06-04 19:42:56	Job Completed: Job #1977, water signature testing.ntms, has completed successfully. To view the results, click here .
627	2025-06-03 20:08:38	Report PDF for web analysis (id: 4122) has been created: click to download
626	2025-06-03 18:28:15	Job Completed: Job #1951, 40-mer MSMS 14CS 14CE.d.tar, has completed successfully. To view the results, click here .
623	2025-06-02 15:12:27	Report PDF for web analysis (id: 3913) has been created: click to download
622	2025-06-02 15:09:03	Report PDF for web analysis (id: 961) has been created: click to download

Figure 64: Jobs page

Click the  button in the **Action** column to left of the Job to cancel a running and queued job. Users can cancel running and queued Jobs they have created. Super Users can cancel Jobs generated by any User.

Click  for a job to download the job log. Alternatively, click on the file name for a completed or failed job to open the job log in the Web Client window.

Click the  button for a completed Job to run a file search for the completed project. From the search result, the project report can be viewed or the folder containing the project can be opened.

Note: Unlike the Byosphere Byos Jobs tab, the web Jobs page does not automatically refresh and does not support rerunning Analysis or Report Jobs.

View Notifications




The **Notification**  page displays a table of the User's notifications, such as completed or pending jobs. The table will be blank if the User has no new notifications. When the User has a new notification, the icon changes to display the notification count:



Figure 65: A count appears to show new Notifications

Click the **Notifications** page icon to display a table of new notifications:



Notifications  

ID ↑↓	Notification ↑↓
1189	Job Completed: Job #1648, AD990_CD3-CD3B2200-200518132233.blgc, has completed successfully. To view the results, click here .

Figure 66: Notification of a completed job


To see the job run results, click the link **here** at the end of the notification. For a completed job, the Search page will open with the completed project as a search result.

The Notification for a failed job contains a different link:

Notifications  

ID ↑↓	Notification ↑↓
1323	Job Failed: Job #2647, AD7_R34-RC11.blgc, has failed. To better understand why your job has failed, you can download the associated log by going to the jobs page . If the failure is not clear, please contact customer support.

Figure 67: Notification of a failed job

The link from a failed job opens the Jobs page. From there, the User can click the  icon to the left of the failed job to download the job log. This log is helpful to determine why the analysis failed:


Action	ID	Name	Status ↓	Type	Submitted By	Submitted On	Started On	Completed On	Notes
	2262	Byonic only with excel report.bysrlt	Failed	Analysis	Sree Paruchuri	2024-12-12 18:28:29	2024-12-12 18:28:51	2024-12-12 18:28:57	

Figure 68: Failed job opened from Notification link

Virtual Client Page

The Byosphere Web Client supports the hosting of Byosphere Virtual Client remote instances of Byosphere Byos for extremely fast performance when opening large projects with large sample files. The Virtual Client instances reside on the Byosphere server host, enabling direct contact over a very fast network. The instances automatically shut down upon logout or timeout to save hosting costs. Each User account is assigned an instance, which persists from their last session when they login again.



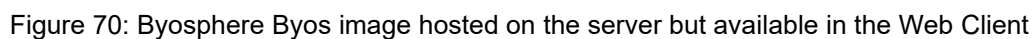
After Byosphere Virtual Client is configured on the server and activated by a Byosphere Administrator, a Virtual Client page icon  is displayed after the others:



Figure 69: Virtual Client icon to open a hosted image of Byosphere Byos

When  is clicked, a hosted Virtual Client instance of Byosphere Byos opens in the Web Client window:



the downloaded sample files:

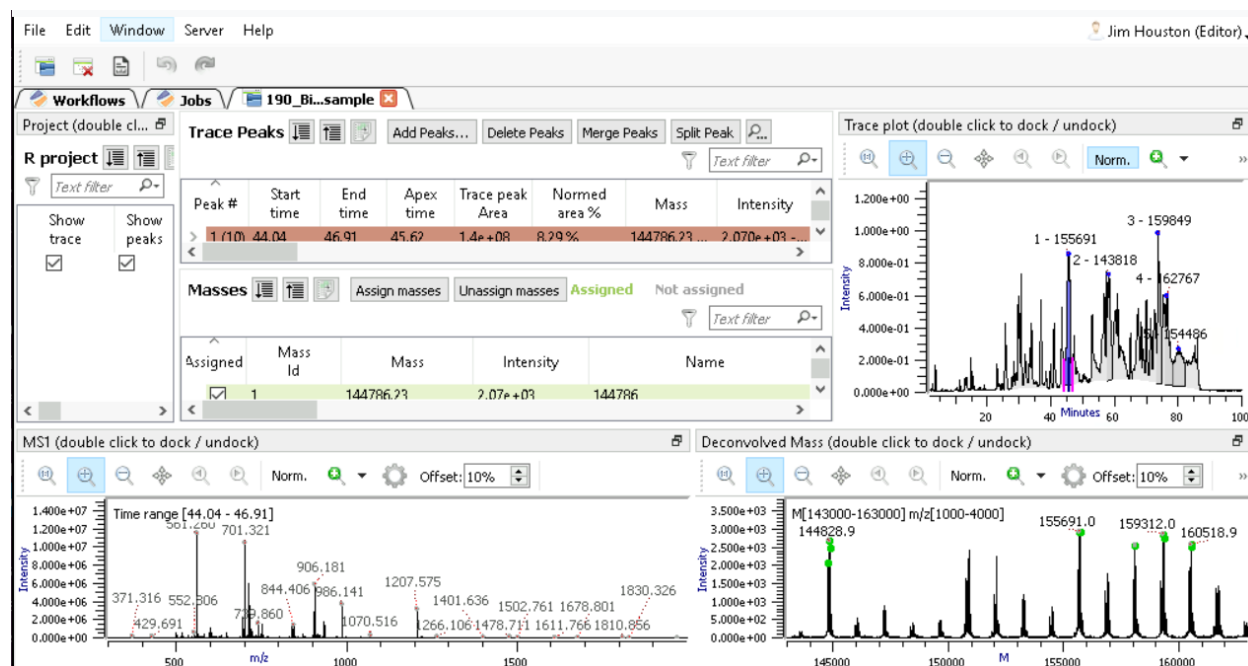


Figure 72: Server project opened in the VM window

The download performance will reflect the network speed and proximity of the Byosphere host machine (where the image is located) to the Byosphere server.

Note: The remote Virtual Client does not currently allow access to local desktop files. Therefore, functions that involve local file access, such as **Upload** and **Download**, have been removed:

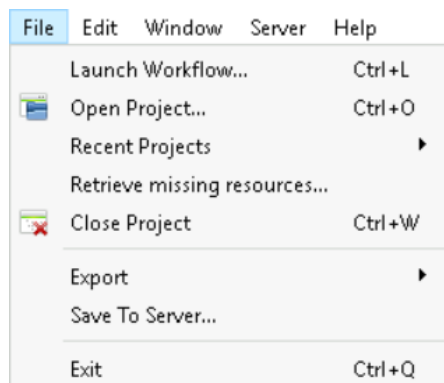


Figure 73: File menus for Virtual Client do not include local file access

The Virtual Client feature is best suited for downloading projects with their sample files, modifying the projects, and saving them again to the server, all with greatly enhanced performance.

Appendix

Manual File Upload

To upload a file in Byosphere Byos Client, choose **File > Upload**. An upload dialog opens:

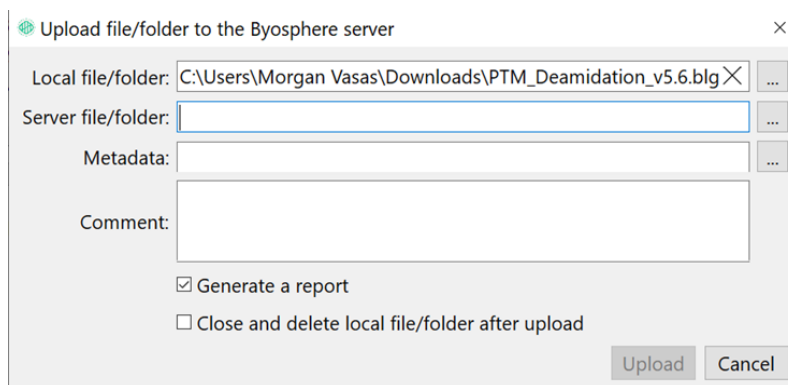



Figure 74: Byosphere Byos Client upload dialog

To select a file on a local drive to upload, click the  button following the **Local file/folder** cell. Navigate to and select the file to upload on the right side:

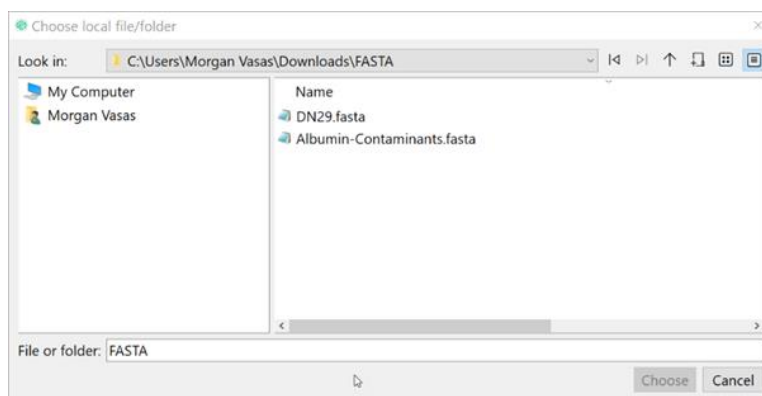


Figure 75: Choose a local file

To upload a folder and its contents, navigate to and select the folder on the right side, then click **Choose**. The **Local file/folder** cell will populate with the folder path and/or file name.

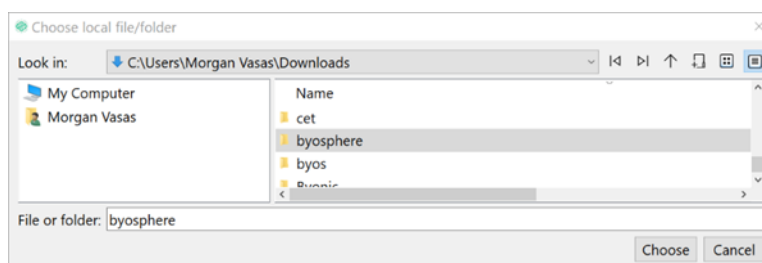



Figure 76: Choose local folder

To choose an upload destination on the Byosphere server, click the  button following the **Server file/folder** cell. Navigate to and select the destination server folder in the left pane:

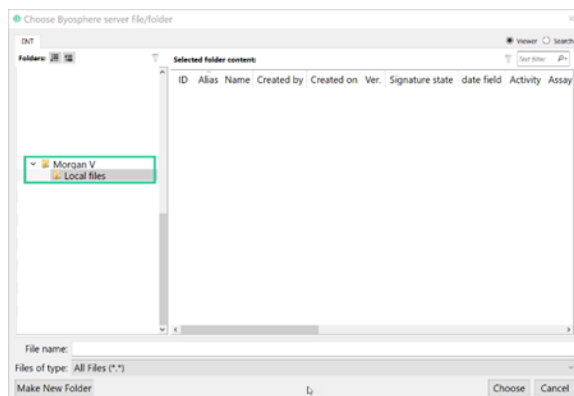


Figure 77: Choosing a server folder as the upload destination

Note that MS file names on the server contain the extension *.pacq. This is a Protein Metrics compression format that allows single MS files, collections of associated MS files, and folders containing MS data file (.d and .raw folders) to be compressed to single *.pacq files. Byosphere Web Client does not compress MS files and should not be used to upload them to server. Uploads of folders containing MS files will compress each file into proper *.pacq format.

Click **Choose** and the folder name and ID is displayed in the Server file/folder cell:

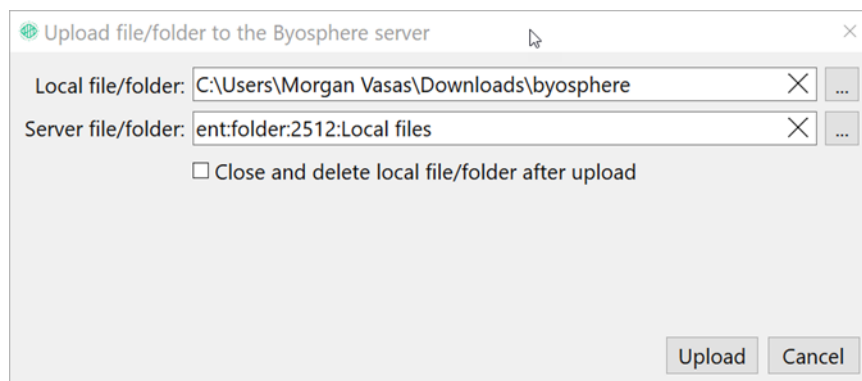


Figure 78: Server destination folder and its ID

To include metadata in the uploaded file, click the ... button to the right of the **Metadata** cell. The **Edit Metadata** dialog opens:

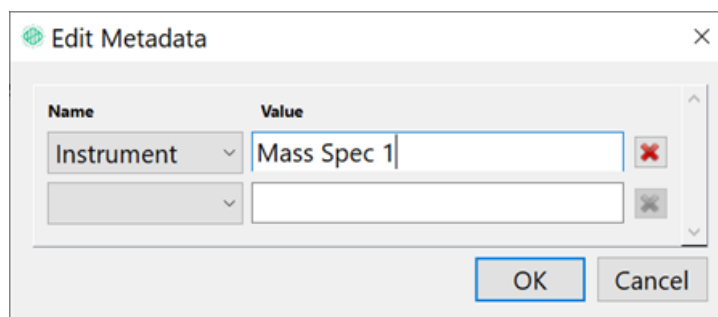
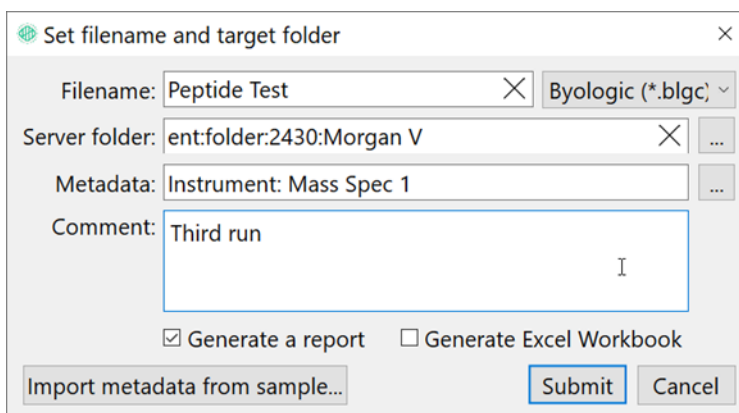


Figure 79: Add metadata values

Add the desired metadata field names and values and click **OK**:



Set filename and target folder

Filename: Peptide Test X Byologic (*.blgc) v

Server folder: ent:folder:2430:Morgan V X ...

Metadata: Instrument: Mass Spec 1 ...

Comment: Third run

☒ Generate a report ☐ Generate Excel Workbook

Import metadata from sample... Submit Cancel

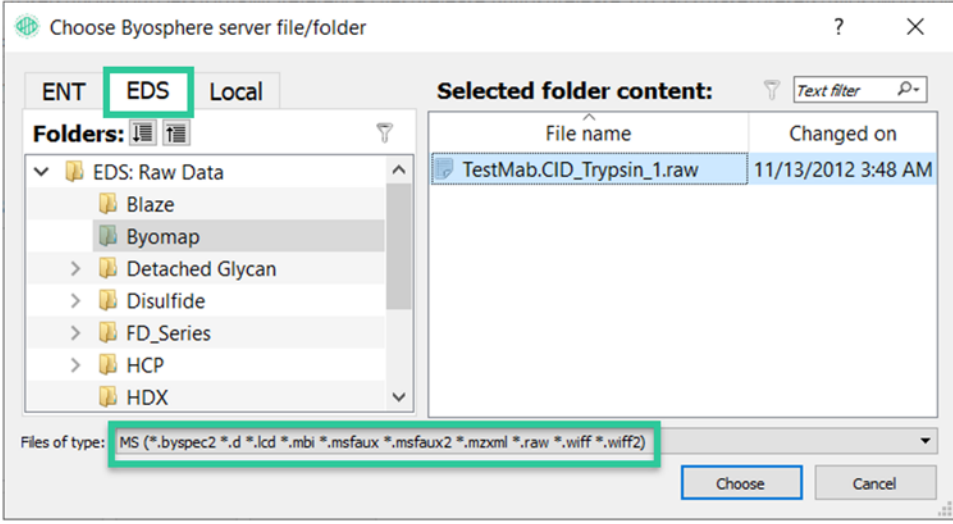
Figure 80: Completed Upload entries

Add an optional **Comment**. To begin the upload, click **Upload**.

Adding files to Projects

Files from External Data Sources (EDS)

An External Data Source (EDS) is a network drive containing sample files that can be mapped to the Byosphere server. If one or more external data source paths (EDS) are mapped in the Byosphere system, they become available as potential sources of server MS sample files. Unlike MS sample files saved to the Byosphere server, these files are not compressed to *.pacq format. To add an MS sample file from an external data source, click **Add sample(s)** as before. In the Choose Byosphere server file/folder dialog, select the **EDS** tab:



Choose Byosphere server file/folder

ENT **EDS** Local

Folders:

- EDS: Raw Data
 - Blaze
 - Byomap
 - Detached Glycan
 - Disulfide
 - FD_Series
 - HCP
 - HDX

Selected folder content:

File name	Changed on
TestMab.CID_Trypsin_1.raw	11/13/2012 3:48 AM

Files of type: MS (*.byspec2 *.d *.lcd *.mbi *.msfaux *.msfaux2 *.mzxml *.raw *.wiff *.wiff2)

Choose Cancel

Figure 81: Choose EDS sample files filtered by standard MS file extensions

Navigate to and select one or more sample files or sample folders and click **Choose**. The samples are added to the workflow with the format that Byos loads local samples:

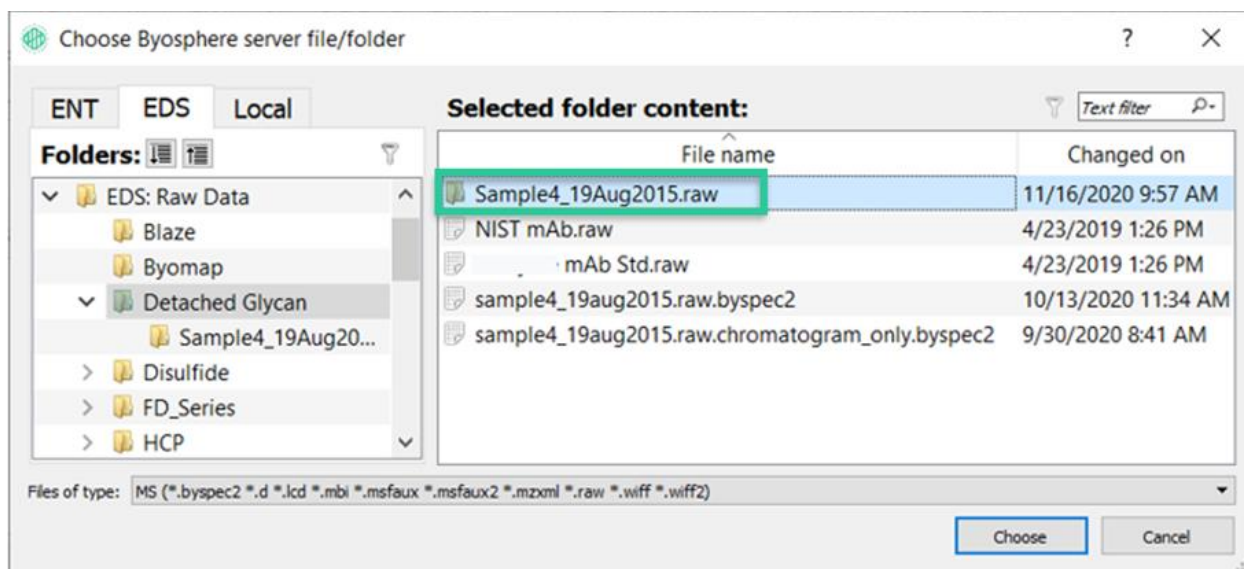


Figure 82: Samples table populated with EDS sample data

Trace files can also be loaded from external data sources. After a sample row is added (from the **Add sample(s)** button for an MS file or the **Add sample** button for Trace-only projects), double-click in the **Trace files** cell and click the **...** button to open the **Choose Byosphere server file/folder** dialog. Click the **EDS** tab to access trace files from the mapped external data sources:

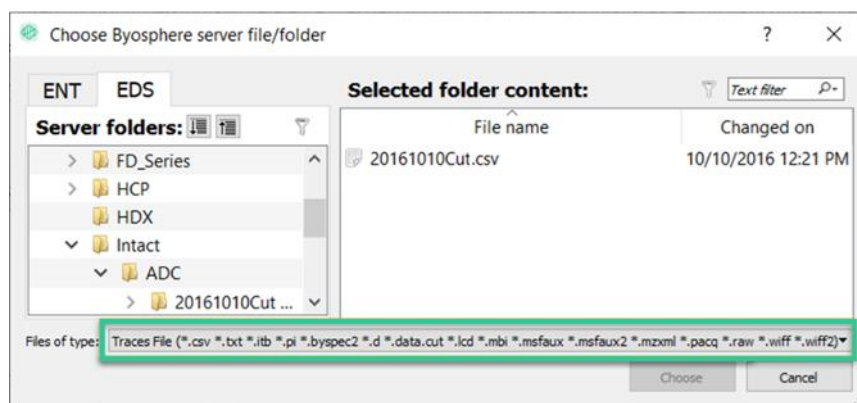


Figure 83: Choose an EDS trace file filtered by Byos extensions

Navigate to and select a trace file and click **Choose**. **Note:** Only MS files and Trace files can be added to Byosphere workflows from external data sources.

Local Sample Files

Local sample files and sample files in *.pacq format can be added to Byosphere workflows from the **Local** tab:

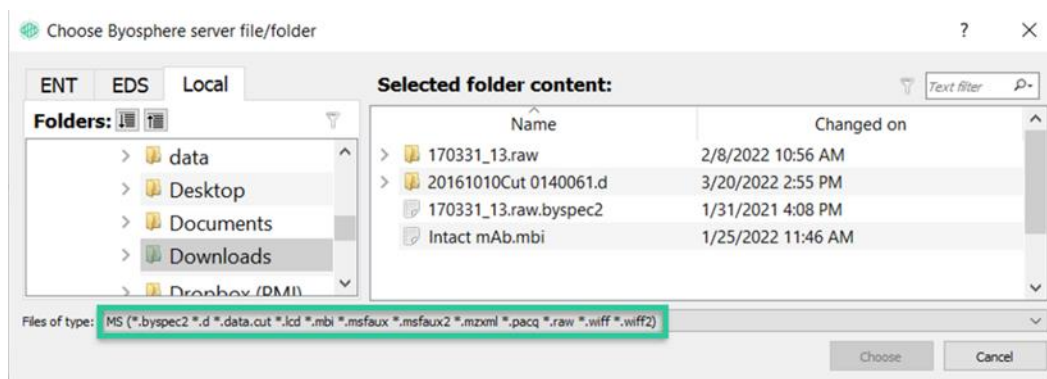


Figure 84: Choose local sample files or MS files in *.pacq format

Upon clicking **Submit a job**, the User is first offered the option to upload the sample file to a separate folder (**Select target directory**) or to the same folder chosen for the project file (**Upload to the project folder**):

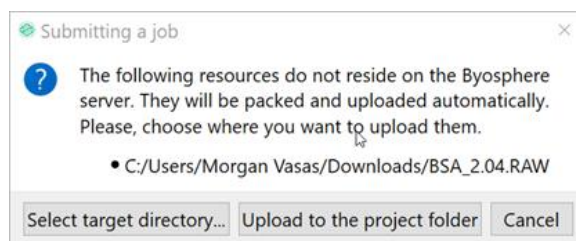


Figure 85: Select the server folder for the uploaded sample files

Note: Older *.pacq sample files must be upgraded to the latest *.pacq format and saved before they can be uploaded.

After submitting the analysis, the local sample files are first uploaded to the server in *.pacq format (if not already in this format). Then the analysis is generated with references to the uploaded server files.

Note: If an older *.pacq format is added, it must be updated to the latest format before it can be used in the project.

This feature allows Byos workflows containing local sample files to be opened and submitted in Byosphere Byos. The local sample files will be uploaded in *.pacq format and the server project will reference those server sample files.

Chromeleon Sample Files

If Chromeleon version 7.2 is installed and configured in Byosphere Byos, samples obtained from Chromeleon can be loaded to workflows and used to generate Byosphere analyses. When properly configured, the sample file chooser displays a **Chromeleon** tab from which to load Chromeleon samples:

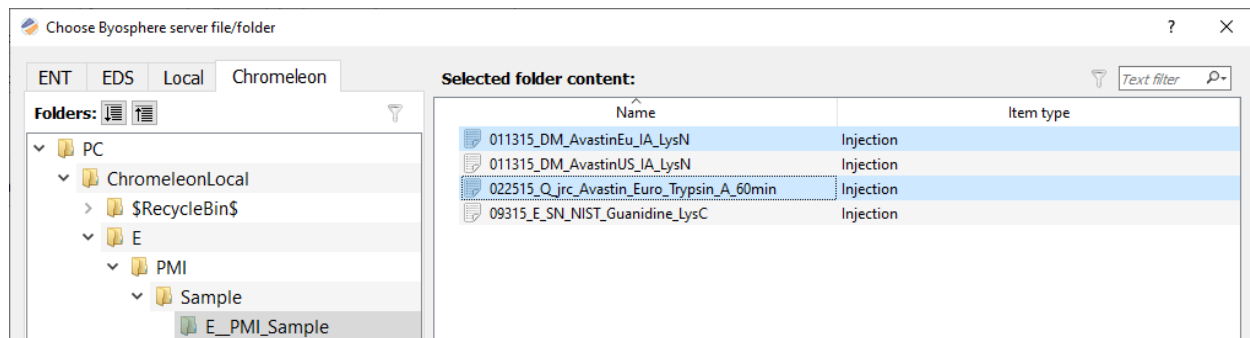


Figure 86: An extra Chromeleon tab appears containing Chromeleon sample files

After submitting the analysis, the Chromeleon files are uploaded to the Byosphere server in *.pacq format and the analysis is run using these server samples.