# Jasper Integration Model

## 1. Developers create semantic models and template reports

Developers use the Jasper Studio to create the semantic models, called “domains”.

Using Jasper Studio, the user can export these as files.

??? There is something else, called “topics”? What are they and do we need them?

The “web designer” ??? would be used to develop ad hoc report templates.

These would be exported as files using the admin interface ???

## 2. Reports are published into production (QA, etc.) environment

When a build image containing the models and reports is deployed to a production environment, the deployment process must do the following operations against the report server in production, using the server’s API or other automation support:

### Login to web services:

???

### For each (new) org:

**Check if organization exists:**

GET http://<host>:<port>/jasperserver-pro/rest\_v2/organizations/organizationID

**Create an organization:**

POST http://<host>:<port>/jasperserver-pro/rest\_v2/organizations?<argument>

{  
"id":"Audit",  
"alias":"Audit",  
"parentId":"Finance",  
"tenantName":"Audit",  
"tenantDesc":"Audit Department of Finance",  
"theme":"default"  
}

**Create a reports folder for organization:**

**Check if user already exists:**

GET http://<host>:<port>/jasperserver[-pro]/rest\_v2/organizations/orgID/users/userID

**Create a user:**

PUT http://<host>:<port>/jasperserver[-pro]/rest\_v2/organizations/orgID/users/userID{  
"fullName":"Joe User",  
"emailAddress":"juser@example.com",  
"enabled":false,  
"password":"mySecretPassword",  
"roles":[  
{"name":"ROLE\_MANAGER"}]  
}

**Check if a user attribute already exists:**

GET http://<host>:<port>/jasperserver[-pro]/rest\_v2/organizations/orgID/users/userID/attributes/  
<attribute name>

**Create attribute for user:**

PUT http://<host>:<port>/jasperserver[-pro]/rest\_v2/organizations/orgID/users/userID/attributes

{  
 "attribute":[  
 {  
 "name": "Attr1",  
 "value":"newValue1"  
 }  
}

Users will be assigned a “tenant\_id” attribute.

**Assign user permissions to report folder:**

PUT http://<host>:<port>/jasperserver[-pro]/rest/permission/path/to/resource/

<entityResource>  
 <Item xsi:type="objectPermissionImpl"  
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">  
 <permissionMask>30</permissionMask>  
 <permissionRecipient xsi:type="userImpl">  
 <externallyDefined>false</externallyDefined>  
 <fullName>California User</fullName>  
 <tenantId>organization\_1</tenantId>  
 <username>CaliforniaUser</username>  
 </permissionRecipient>  
 <URI>repo:/path/to/resource</URI>  
 </Item>  
<Item xsi:type="objectPermissionImpl"

All users have read access to public reports:

* URI = /public/reports
* permissionMask = 2 (readonly)

Reader users have read access to org reports:

* URI = /organizations/orgid/reports
* permissionMask = 2 (readonly)

Contributor users have read access to org reports:

* URI = /organizations/orgid/reports
* permissionMask = 30 (read-write-delete, TBD)

### For each report:

**Publish report**

POST http://<host>:<port>/jasperserver[-pro]/rest\_v2/resources/path/to/folder  
?createFolders=true

??? Is this the “uploading file resources” type? Or multi-part

## 3. Reporting service stores reports in folders

The following structure for organizations is assumed:

/root  
 /organizations  
 /orgid1  
 /orgid2

The following structure for reports is assumed:

/organizations  
 /orgid  
 /reports  
/public  
 /reports

## 4. Reporting service has one (or a few) users per org, granting folder access

The following structure for users is assumed:

/organizations  
 /orgid  
 users  
 reader  
 contributor

Users are assigned permissions to report folders as described above.

## 5. Servlet uses report service API to enumerate reports available for org

**Enumerate domains:**

GET http://<host>:<port>/jasperserver[-pro]/rest\_v2/resources  
?folderUri=/public/reports or /organizations/orgid/reports  
&type= semanticLayerDataSource  
&recursive=true  
&forceFullPage=true

**Enumerate reports:**

GET http://<host>:<port>/jasperserver[-pro]/rest\_v2/resources  
?folderUri=/public/reports or /organizations/orgid/reports  
&type=reportUnit  
&recursive=true  
&forceFullPage=true

## 6. Servlet provides agency UI to control report permissions for ANet users

## 7. User launches new reporting portal application

## 8. Portal provides UI to select report to execute, based on ANet user permissions

## 9. Portal calls the reporting service by URL to load the selected report into a window.

http://<host>:<port>/<context>/flow.html?  
\_flowId=viewReportFlow  
&reportUnit=/supermart/Details/CustomerDashboard  
&customerID=4012  
&country=US&country=Canada  
&output=pdf

??? URL format:

* One time token
* User
* Whether customizable
* Whether schedulable

## 10. Report execution can scheduled within the report display window

???

## 11. Report accesses data from multi-tenant ADP database based on user

??? Domain will use user attribute for tenant id

# Summary of inclusion criteria analysis

**Ability to create Operational Reports:** It looks like the Jasper Studio (desktop report designer) has very robust capabilities, but I don’t believe these reports can be modified.

**Standard Report and Chart Types:** Seems to have a good palette of all the basic styles

**Web Based - Ad hoc reporting:** The adhoc reporting capability needs to be investigated more. It is entirely separate from the Jasper Studio designer and much more limited. What you can do:

* Design a report from scratch, from a domain or view already developed (probably by active)
* Change text, formatting, sorting, do conditional formatting
* Provide user filters

What is probably missing (to be confirmed):

* Ability to stack multiple data elements within a row (like a customer address)
* Ability to put multiple data elements into a group header (like various information about an activity, with detailed rows about the fees).

**Export Data to Excel and CSV with many rows of detail data:** Export capabilities look very robust

**Schedule report emailing to multiple stakeholders:** The scheduling capabilities of the server are very robust, and seem to include everything we already do in Activenet, including FTP, and more.

**Ability make Standard Template reports read only:** Not confirmed. I suspect will be easy with e

**After selecting report in ANET, restricted by ANET's user profile settings, display report in another window:** This looks straightforward.

**When users create adhoc reports, ANET must be able to enumerate them from the reporting system to update its own security system:** Demo of REST API shows this is possible.

**When displaying a report, it must be possible for ANET to control which org's data is displayed:** Jasper has specific support for selecting data in a multi-tenant implementation. I don’t understand the details

**It must be possible to control when a report is launched whether it can be modified and/or saved:** To be confirmed; I think it will be straight-forward with their security model.

**Deployment process must be able to automatically create any server objects needed on a per-org basis:** To be confirmed; I think their API supports this.

# Questions

Ad hoc views

* Add columns from the meta data
* Only one column per column?

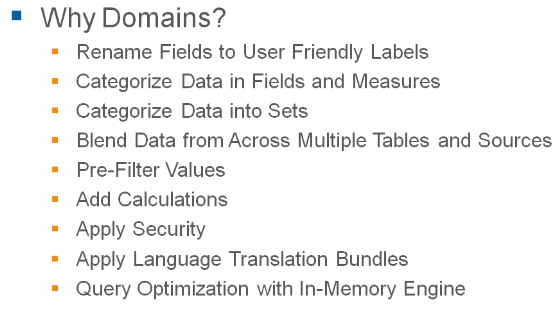
Scheduling:

* Can it be done through API
* Does it require “full” server access?

Security:

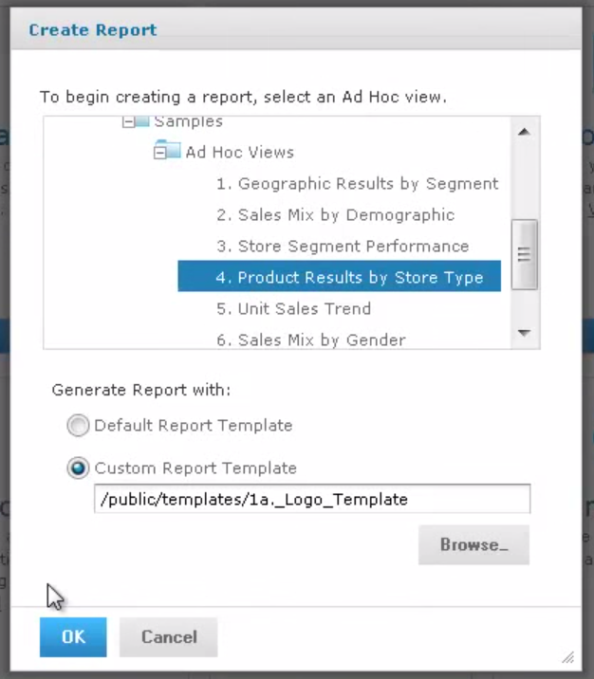
* How are permissions associated with roles?
* Data selection based on tenant id as a function of organization?

# Domains



# Report design

Ad hoc view with a template





Interactively modify report

* Column widths
* Conditional formatting
* Sorting

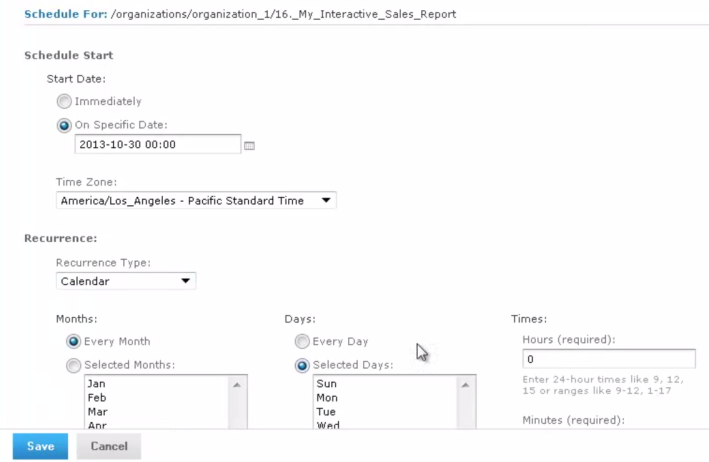


# Multi-tenant

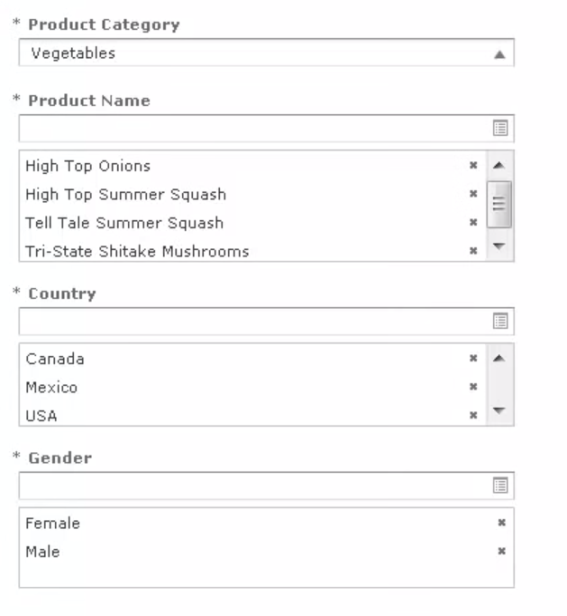
* Create organization
* Organizations
  + Access only reports in organization or public folder
  + Organization hierarchy
  + Users for org

# Scheduling

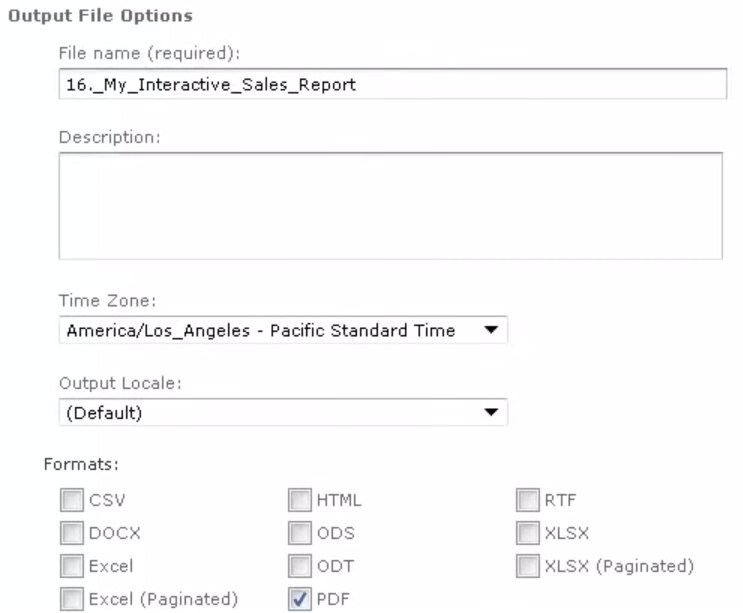
## Schedule

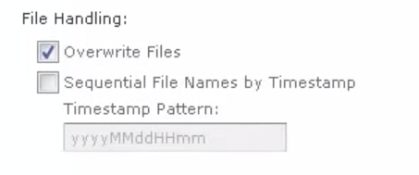


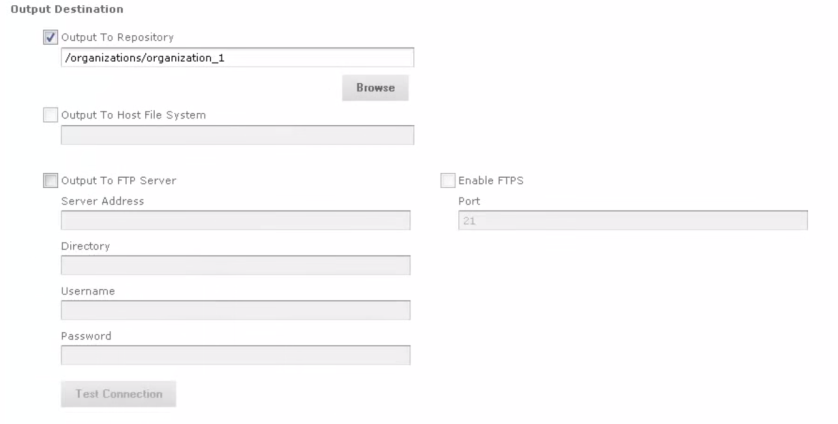
## Filters

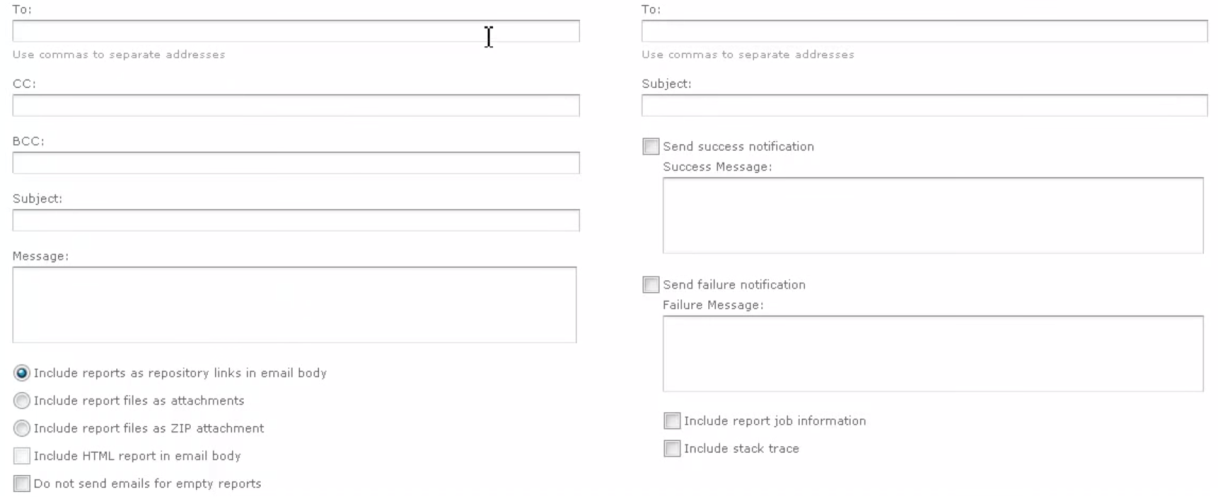


## Output options









# Technical quickstart

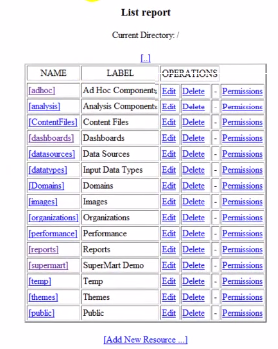
http://www.jaspersoft.com/quick-start

## Web services demo

### Login



### List reports



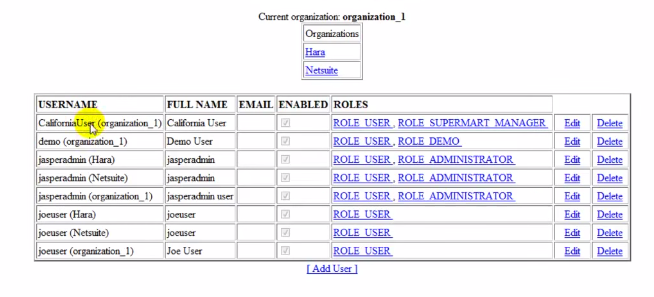


### Run report with filters

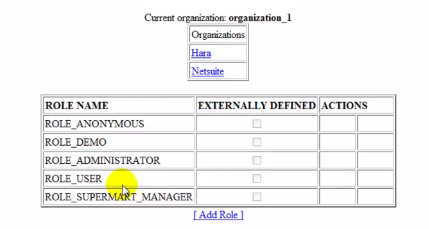




### List users



### List roles



### Documentation

Web services folder in the docs directory in the install

## Launching report via HTML

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# Youtube

<https://www.youtube.com/user/JaspersoftBISuite>

## Designer demo

<https://www.youtube.com/watch?v=103MUpnyrvk&list=PL5NudtWaQ9l4LEzDAU-DdBQAp21lLH00r>

Had to edit formulas to put columns onto report

# Reviews

<https://www.trustradius.com/products/jaspersoft/reviews>

It was reviews like the one below that steered me away from Jaspersoft.    The one below was the one I still had in my notes. But let’s schedule a demo.. You never know.

Jaspersoft Cons

* Jaspersoft seriously needs some quality control on their products. An "Enterprise" application should not be so buggy. I often feel like we are their beta-testers rather than paying customers.
* It is extremely embarrassing when my customers attempt to run a report and end up with a Java error stack on their screen instead. While Jaspersoft has made improvements in catching certain errors and providing an "oops" screen, we still see Java error dumps on a regular basis.
* Jaspersoft's technical support has been little help for anything other than the most basic of issues. Most problems are instantly categorized as "Defect/Enhancement submitted" with no solution offered.

ROI on Jaspersoft purchase

* Jaspersoft has decreased our productivity due to the excessive time we've had to spend troubleshooting errors.
* We have seen positive results from our data warehousing and reporting efforts.
* Dashboards have allowed us to communicate important business insights throughout our company.

Likelihood to Renew Jaspersoft : 5 of 10

Jaspersoft Average: 8.3

**5.0**

We had to stop paying our support to get Jasper management to pay attention to our issues. We are now working closely with them to try to resolve these problems. If they can be resolved to our satisfaction, we will continue with them. If not, we will look elsewhere.