

D4Science Infrastructure - Support #12249

Need installed KNIME 3.6 and R 3.4 including the listed plugins

Jul 26, 2018 04:00 PM - Lars Valentin

Status:	Closed	Start date:	Oct 01, 2018
Priority:	High	Due date:	
Assignee:	Leonardo Candela	% Done:	100%
Category:		Estimated time:	0.00 hour
Infrastructure:	Production		
Description <p>Dear @gianpaolo.coro@isti.cnr.it,</p> <p>as requested by @pasquale.pagano@isti.cnr.it, I opened a sub-ticket to better see your status. I would highly appreciate if you could keep me updated on the status of the changes. Can you somehow make sure that we get informed if there are later changes on the software?</p> <p>In order to fulfill our project tasks, we need an updated KNIME with several plugins installed and same for R, as mentioned in the Main ticket.</p> <p>Please find attached the Excel file containing the plugins for the new KNIME version 3.6</p> <p>After installing the plugins there is a setting in KNIME which needs to be checked. You can find it under File -> Preferences -> KNIME -> FSK-lab settings. Here the path to the local R should be present and it should not complain that R packages are missing.</p> <p>We are working under R version 3.4.4 - can you provide that version as well?</p> <p>The most important R packages are:</p> <ul style="list-style-type: none">• XML• igraph• miniCRAN• mc2d• msm• foreach• tidyverse• doParallel• ggplot2• gridExtra• Rserve <p>In order to test if the basic requirements are set, I also attached a simple KNIME-workflow which can be used by you inside of KNIME.</p> <p>Thanks a lot for your help!</p> <p>Lars</p>			
Subtasks:			
Task # 12578: Need installed FSKlab plugin for KNIME and the provided Testworkflow in D...			Closed
Support # 12580: WP6: Question on KNIME instances and DM			Closed

History

#1 - Jul 26, 2018 05:57 PM - Gianpaolo Coro

- Tracker changed from Project Task to Support
- Project changed from 30 to D4Science Infrastructure
- Assignee changed from Gianpaolo Coro to _InfraScience Systems Engineer
- Target version changed from Dataminer Algorithms to KNIME
- Infrastructure Production added

#2 - Jul 27, 2018 04:03 PM - Andrea Dell'Amico

@lars.valentin@bfr.bund.de I see that I can download a bundle that contains all the knime extensions, but not the community one. I also did not find a way to install them programmatically. I can extract the relevant files from the zip bundle and from the bintray.com URLs that you provided, but it's not a task that can be automated easily and it does not solve the problem of the community extensions.

#3 - Jul 27, 2018 04:09 PM - Andrea Dell'Amico

- Status changed from New to In Progress
- % Done changed from 0 to 20

About the R packages: the missing ones from your list were

miniCRAN
msm
Rserve

and they will be available on all the dataminer servers in some minutes.

#4 - Jul 27, 2018 04:27 PM - Lars Valentin

Andrea Dell'Amico wrote:

@lars.valentin@bfr.bund.de I see that I can download a bundle that contains all the knime extensions, but not the community one. I also did not find a way to install them programmatically. I can extract the relevant files from the zip bundle and from the bintray.com URLs that you provided, but it's not a task that can be automated easily and it does not solve the problem of the community extensions.

Dear @andrea.dellamico@isti.cnr.it,

as a first step I suggest that you do it the KNIME way via the KNIME GUI, its the most easy way. After installing KNIME 3.6. to the server <https://www.youtube.com/watch?v=wibggQYr4ZA> , you just need to add the repositories in the menu, and add all the plugins afterwards <https://www.youtube.com/watch?v=8HMx3mJXiw> . The plugins will be then downloaded from the repositories. And there is the mentioned FSK-lab setting were the R path needs to be checked (after installing all relevant R-packages like Rserve, miniCran ...).

In the past, we have offered to help you with maintaining your KNIME installation. I suggest we have a technical web meeting to talk about the options. By the way, there are ways to handle KNIME more automatically /programatically, I am using ANSIBLE.

Regarding R, I understand that now all required plugins from the list are present? Thank you!
What version of R is installed at the moment and how can we check that ourself in the future and make sure it will not be changed without informing us before?

Best wishes
Lars

#5 - Jul 27, 2018 04:47 PM - Andrea Dell'Amico

Lars Valentin wrote:

In the past, we have offered to help you with maintaining your KNIME installation. I suggest we have a technical web meeting to talk about the options.

OK by me. Next week? Not on Monday morning.

By the way, there are ways to handle KNIME more automatically /programatically, I am using ANSIBLE.

We are using ansible too.
The main problem here is how to retrieve the plugins files, I know that I can do that from the desktop but I was hoping to be able to avoid that step.

Regarding R, I understand that now all required plugins from the list are present? Thank you!

Yes, they are there.

What version of R is installed at the moment and how can we check that ourself in the future and make sure it will not be changed without informing us before?

All the nodes have R 3.4. I guess that the next major step will be upgrading the servers distribution, but that will not happen in the short term and you will be informed many weeks in advance.

Best wishes
Lars

#6 - Jul 27, 2018 05:02 PM - Lars Valentin

Andrea Dell'Amico wrote:

Lars Valentin wrote:

In the past, we have offered to help you with maintaining your KNIME installation. I suggest we have a technical web meeting to talk about the options.

OK by me. Next week? Not on Monday morning.

How about Tuesday then? Could you set something up and invite me?

By the way, there are ways to handle KNIME more automatically /programmatically, I am using ANSIBLE.

We are using ansible too.

The main problem here is how to retrieve the plugins files, I know that I can do that from the desktop but I was hoping to be able to avoid that step.

Great that you use Ansible as well, makes things more easy. I found in the internet Ansible files from this guy and learned from it <https://github.com/NLeSC/Chemical-Analytics-Platform/tree/master/roles/knime/tasks> . There is an executor in KNIME which you can call by console and force it to download and install or uninstall plugins via repositories. It usually works well, but sometimes it doesn't work and I have to fix it manually.

Best wishes
Lars

#7 - Jul 27, 2018 05:46 PM - Andrea Dell'Amico

Lars Valentin wrote:

Andrea Dell'Amico wrote:

Lars Valentin wrote:

In the past, we have offered to help you with maintaining your KNIME installation. I suggest we have a technical web meeting to talk about the options.

OK by me. Next week? Not on Monday morning.

How about Tuesday then? Could you set something up and invite me?

Tuesday at 12:00? Is it OK? I'll send you a google hangouts link 10 minutes before the start.

By the way, there are ways to handle KNIME more automatically /programmatically, I am using ANSIBLE.

We are using ansible too.

The main problem here is how to retrieve the plugins files, I know that I can do that from the desktop but I was hoping to be able to avoid that step.

Great that you use Ansible as well, makes things more easy. I found in the internet Ansible files from this guy and learned from it <https://github.com/NLeSC/Chemical-Analytics-Platform/tree/master/roles/knime/tasks> . There is an executor in KNIME which you can call by console and force it to download and install or uninstall plugins via repositories. It usually works well, but sometimes it doesn't work and I have to fix it manually.

Nice! I fear that knime itself is not available anymore without any interaction with the knime site, but I'll give it a shot.

#8 - Jul 30, 2018 04:00 PM - Lars Valentin

Dear Andrea,

Tuesday at 12:00? Is it OK? I'll send you a google hangouts link 10 minutes before the start.

Sounds fine to me! I just hope I can connect then, sometimes we have issues with our firewall.

Nice! I fear that knime itself is not available anymore without any interaction with the knime site, but I'll give it a shot.

We did not try, we solved it by downloading the file manually and stored it for the later use of ANSIBLE.

See you tomorrow then!

Best wishes
Lars

#9 - Jul 31, 2018 04:13 PM - Lars Valentin

- File ANSIBLEstuff added

Dear Andrea,

as promised I provide you some of my ANSIBLE code as inspiration for you.

Here a short list of my final steps

NEW: check if a KNIME process is running in the DataMiner

- check if a plugin has a new version or is not installed yet (FSKlab_ICPMF is our key plugin)
- if old version is installed (HANDLER?)
 - remove old version first (either via uninstall or the new way for testing by just deleting all related plugin files
 - run dummy workflow to force KNIME to use -clean in order to accept the recent changes
- install new plugin version
- run dummy workflow again with - clean feature

as dummy workflow you could use my provided KNIME test workflow. It should run through if all used plugins are present and working properly.

I did not find yet a way to include the path of R automatically to the special FSKlab_Rpath in the KNIME GUI

plugins.yml

```
---

- name: uninstall KNIME plugins
  shell: "{{ knime_dir }}/knime_executor/knime -nosplash -application org.eclipse.equinox.p2.director -profile
  KNIMEProfile -destination {{ knime_dir }}/knime_executor -repository {{ knime_plugin_repository }} -uninstall
  IU {{ item }} && rm -rf {{ knime_dir }}/knime_executor/plugins/{{ item }}.installed"
  with_items: "{{ knime_plugin_uninstall }}"
  become: yes
  become_user: "{{ knime_user }}"
  notify:
    - run dummy workflow
    - restart apache-tomee

- name: install KNIME plugins
  shell: "{{ knime_dir }}/knime_executor/knime -nosplash -application org.eclipse.equinox.p2.director -profile
  KNIMEProfile -destination {{ knime_dir }}/knime_executor -repository {{ knime_plugin_repository }} -installIU
  {{ item }} && touch {{ knime_dir }}/knime_executor/plugins/{{ item }}.installed creates={{ knime_dir }}/knime
  _executor/plugins/{{ item }}.installed"
  with_items: "{{ knime_plugin_install }}"
  become: yes
  become_user: "{{ knime_user }}"
  notify:
    - run dummy workflow
    - restart apache-tomee
```

host_vars:

```
knime_plugin_uninstall: #[]
  - de.bund.bfr.knime.fsklab.feature.feature.group
```

handler:

```
--

- name: run dummy workflow #to reset plugin-list and restart apache-tomee
  shell: "{{ knime_dir }}/knime_executor/knime -nosplash -clean -application org.knime.product.KNIME_BATCH_APP
  LICATION -workflowDir='/opt/knime_server/workflow_repository/workflows/dummy'"
  become: yes
```

```
become_user: "{{ knime_user }}"
```

main.yml:

```
knime_plugin_repository: "http://update.knime.org/analytics-platform/{{ knime_update_version }},http://update.knime.org/store/{{ knime_update_version }},http://update.knime.org/community-contributions/trusted/{{ knime_update_version }},http://update.knime.org/community-contributions/{{ knime_update_version }},https://dl.bintray.com/silebat/fsklab_icpmf,https://github.com/SiLeBAT/Other/raw/master/de.bund.bfr.knime.other.aaw.feas/update,https://dl.bintray.com/silebat/pmmmlab,http://dl.bintray.com/silebat/generic,http://dl.bintray.com/silebat/internal/"
knime_plugin_install:
  - org.knime.features.testingapplication.feature.group
  - org.knime.features.datageneration.feature.group #KNIME Data Generation http://update.knime.com/analytics-platform/3.6 Lars
  - org.knime.features.base.filehandling.feature.group #KNIME File Handling Nodes http://update.knime.com/analytics-platform/3.6 Lars
  - org.knime.features.r.feature.group #KNIME Interactive R Statistics Integration http://update.knime.com/analytics-platform/3.6 Lars
  - org.knime.features.base.feature.group #KNIME Core http://update.knime.com/analytics-platform/3.6 Lars
  - org.knime.features.ext.jfreechart.feature.group #KNIME JFreeChart http://update.knime.com/analytics-platform/3.6 Lars
  - org.knime.features.ext.svg.feature.group #KNIME SVG Support http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.webservice.client.feature.group #KNIME Web Service Client http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.virtual.feature.group #KNIME Virtual Nodes http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.textprocessing.feature.group #KNIME Textprocessing http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.textprocessing.language.german.feature.group #KNIME Textprocessing German Language Pack http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.textprocessing.language.spanish.feature.group #KNIME Textprocessing Spanish Language Pack http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.textprocessing.language.french.feature.group #KNIME Textprocessing French Language Pack http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.stats2.feature.group #KNIME Statistics Nodes (Labs) http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.socialmedia.feature.group #KNIME Social Media Connectors (Twitter & Google) http://update.knime.com/analytics-platform/3.6 Matthias
  - com.knime.features.reporting.designer.feature.group #KNIME Report Designer http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.webanalytics.feature.group #KNIME Webanalytics http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.python2.feature.group #KNIME Python Integration http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.perl.feature.group #KNIME Perl Integration http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.optimization.feature.group #KNIME Optimization extension http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.osm.feature.group #KNIME Open Street Map Integration http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.network.feature.group #KNIME Network Mining http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.network.distmatrix.feature.group #KNIME Network Mining distance matrix support http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.neighborgram.feature.group #KNIME Neighborgram & ParUni http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.distmatrix.feature.group #KNIME Distance Matrix http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.itemset.feature.group #KNIME Itemset Mining http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.lucene.feature.group #KNIME Indexing and Searching http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.birt.feature.group #KNIME HTML/PDF Writer http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.exttool.feature.group #KNIME External Tool Support http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.arima.feature.group #KNIME Autoregressive integrated moving average (ARIMA) http://update.knime.com/analytics-platform/3.6 Matthias
  - org.knime.features.ext.exttool.feature.group #KNIME External Tool Support http://update.knime.com/analytics-platform/3.6 Matthias
  - de.bund.bfr.knime.fsmlab.feature.feature.group #FSK Lab Feature https://dl.bintray.com/silebat/fsklab_icpmf Lars
  # - de.bund.bfr.knime.fsmlab.legacy.feature.feature.group #Legacy FSK-Lab nodes https://dl.bintray.com
```

```
m/silebat/fsklab_icpmf Lars
- de.bund.bfr.knime.pmm.base.feature.group #PMM Nodes https://dl.bintray.com/silebat/pmmmlab/ Lars
- de.bund.bfr.knime.gis.feature.feature.group #KNIME Nodes for GIS and Graph Visualization http://dl.bintray.com/silebat/generic/ Lars Warenstrominfo
- de.bund.bfr.knime.other.aaw.feas.feature.group #ZoMoPlugin-OtherFeats_aaw https://github.com/SiLeBAT/Other/raw/master/de.bund.bfr.knime.other.aaw.feas/update Alex Mibi-Portal
### - de.bund.bfr.knime.internal.feature.feature.group #Rhome and editable node http://dl.bintray.com/silebat/internal/ Alex RiskRanking
- de.nbi.cibi.feature.feature.group #de.NBI - CIBI Extension http://update.knime.com/community-contributions/3.6 M. Flor
- org.knime.knip.feature.feature.group #KNIME Image Processing http://update.knime.com/community-contributions/3.6 M. Filter AGINFRA
```

Thank you for the webmeeting and please let me know if I can help somehow.

Best wishes
Lars

PS. In order to keep the formatting I attach a file with the content of this post.

#10 - Aug 01, 2018 01:05 PM - Lars Valentin

Dear Andrea,

in the future we want to allow the user to run there own R models in our service (workflow). The issue we face is that we do not know in advance what R packages the user will use. Therefore we can't ask you in advance to install those packages for us. Do you have an idea how to handle that? We came up with the idea to just install all CRAN packages available (>11.000 /28 GB).

What do you think?

Best wishes
Lars

#11 - Aug 01, 2018 04:30 PM - Andrea Dell'Amico

Lars Valentin wrote:

Dear Andrea,

in the future we want to allow the user to run there own R models in our service (workflow). The issue we face is that we do not know in advance what R packages the user will use. Therefore we can't ask you in advance to install those packages for us. Do you have an idea how to handle that? We came up with the idea to just install all CRAN packages available (>11.000 /28 GB).

What do you think?

We cannot do it: we recompile all the packages every night to have the latest version of each one. Currently the task needs a couple of hours, with so many packages it could last days.

Right now we manage the R package requests via a cron job that takes a list from a subversion repository. New packages are installed on the dataminers after 10 minutes since the list on subversion has been updated. You can find the current lists here: <http://svn.research-infrastructures.eu/public/d4science/gcube/trunk/data-analysis/RConfiguration/RPackagesManagement/> (not only R packages, but deb dependencies, and some R packages are installed from github). The list is not complete, because many packages install other ones as dependencies and we do not track them.

If your workflows are too dynamic to be handled by the above methods, we'll have to think about a different way to manage the R packages. That discussion should go into the VRE, it's not a tickets system argument.

#12 - Aug 03, 2018 06:53 PM - Andrea Dell'Amico

I'll start with the knime installation next week.

#13 - Aug 13, 2018 09:31 AM - Lars Valentin

Andrea Dell'Amico wrote:

I'll start with the knime installation next week.

Hey Andrea,

how is the installation going? When can we test the new versions?

About the R packages issue, I am trying to suggest CNR that the VRE automatically reads in a file with the needed packages if a new model was uploaded and these packages are then added to your install list, in order to avoid too many packages.

Best Lars

#14 - Aug 20, 2018 08:12 PM - Andrea Dell'Amico

Lars, we are suffering problems with one of our infrastructures so I cannot complete the installation until they have been solved. I expect that in the next couple of days the situation will be back to normal.

About the R packages, the one you are proposing is the method that we are already following. Adding an additional source is not a big deal, I don't know if it's the best way possible. The alternative is giving you write access to our subversion repository I guess.

#15 - Aug 24, 2018 12:48 PM - Lars Valentin

Hey Andrea,

I was wondering if there is the option to manually set up one datamainer with the new version of KNIME and the mentioned nodes. Since we need to develop the underlying KNIME workflows and to test them in the Datamainer to showcase the later procedures soon, it would be fine for us to target one specific datamainer via REST interface for now.

Maybe this could serve as workaround until the main setup is available?

Best wishes
Lars

#16 - Aug 24, 2018 12:51 PM - Andrea Dell'Amico

Hi Lars, the infrastructure problems were solved yesterday evening. I'll start working on the KNIME installation next Monday.

#17 - Aug 29, 2018 10:13 AM - Lars Valentin

Andrea Dell'Amico wrote:

Hi Lars, the infrastructure problems were solved yesterday evening. I'll start working on the KNIME installation next Monday.

Hey Andrea,

how is it going? Did you succeed? Do you need further help?

We are going to have a webmeeting with CNR on friday. Maybe it makes sense you join in <https://doodle.com/poll/wsmq5yzdbum8kz53> ?

Best Lars

PS. I was wondering how you make sure each datamainer receives the updates of KNIME plugins and R packages in parallel, since there might be processes running. Do you update each datamainer individually via ANSIBLE each time there is no active process or do you handle that another way?

#18 - Aug 30, 2018 12:56 PM - Andrea Dell'Amico

Lars Valentin wrote:

Andrea Dell'Amico wrote:

Hi Lars, the infrastructure problems were solved yesterday evening. I'll start working on the KNIME installation next Monday.

Hey Andrea,

how is it going? Did you succeed? Do you need further help?

I'm having trouble with the plugins installation. Only a couple install successfully, I'm trying to understand if there's something missing on my part and then I'll report.

We are going to have a webmeeting with CNR on friday. Maybe it makes sense you join in <https://doodle.com/poll/wsmq5yzdbum8kz53> ?

Best Lars

PS. I was wondering how you make sure each datamainer receives the updates of KNIME plugins and R packages in parallel, since there might be processes running. Do you update each datamainer individually via ANSIBLE each time there is no active process or do you handle that another way?

The R packages are usually not a problem, because the old package is available until the installation of the new one has been completed. As the KNIME plugins seems to be more problematic, I'm going to add a check so that the installation starts only when no datamainer job is running.

#19 - Aug 30, 2018 01:43 PM - Lars Valentin

Hey Andrea,

could you tell me what is installed already and what is missing? I might have an idea then.

Best Lars

#20 - Aug 30, 2018 03:04 PM - Andrea Dell'Amico

Only two installed correctly, I still have to look at the error logs of the other ones:

```
org.knime.features.base.feature.group.installed
org.knime.features.ext.svg.feature.group.installed
```

#21 - Aug 30, 2018 03:05 PM - Andrea Dell'Amico

Never mind, I guess I've found at least one mistake from my part: the plugins repositories do not use the point version (I used 3.6.0 instead of 3.6).

#22 - Aug 30, 2018 05:29 PM - Andrea Dell'Amico

- % Done changed from 20 to 50

After fixing the plugins repository URLs, I had to run the plugins installation tasks three times on my test machine before being able to install all the plugins: the installation often fails because of timeouts contacting the repositories.

I'm going to install everything on all the dataminer instances anyway, the plugins installation lasts half an hour on the dev machine so the operation is going to require a lot of time.

Now, two questions:

- How do you plan to manage plugins upgrades? changing the `knime_plugin_uninstall` each time any plugin must be upgraded?
- We cannot run your dummy workflow, because we don't have it. Or the directory specified in the options, `-workflowDir='/opt/knime_server/workflow_repository/workflows/dummy'` is supposed to be non existent?

#23 - Aug 30, 2018 05:31 PM - Andrea Dell'Amico

One thing about the knime executable path: do you need an absolute path? because the knime command is available in the user's environment path, you have to just invoke knime.

#24 - Aug 31, 2018 06:37 AM - Lars Valentin

- File *dummy.knwf* added

Good morning Andrea,

I just added a dummy workflow for you to be imported into KNIME for later use in ANSIBLE. Its literally an empty workflow which does nothing else then executing a node (here the table creator was choosen). The idea here is that KNIME is forced to startup with the "-clean", in order to recheck the list of all installed plugins - and to do so I run the dummy workflow. This step is very time consuming and should be applied only if plugins where changed or KNIME does behave in an unexpected way.

So far I did not include an automatic update function for the plugins in ANSIBLE - my script has not been finished and is not part of the main cron job yet. Therefore, I activate and run the script over those plugins I need to update manually for now (`knime_plugin_uninstall`). The rule here is that a plugin must be uninstalled and then installed if you want to update a plugin - there is no straight update function available. In the near future, I want to check if a new version of an installed plugin is available and if , I use the handler to uninstall and install the new version. If you are already working on that, I would be glad if you could share your script.

Regarding the paths questions, we do not run a standalone KNIME in batch mode, since we use a KNIME server. Therefore, the mentioned paths in my scripts might not suit your environment. Hence if available, I expect you can avoid the KNIME executable path and invoke KNIME directly.

I hope this helps to clarify things. Please, don't hesitate to contact me for updates on the status or if you face further issues. There is a FSK test workflow available in this thread - I would be glad if you could inform me as soon it does run on the dataminer.

Thank you for your effort!

Best wishes
Lars

#25 - Aug 31, 2018 06:58 PM - Andrea Dell'Amico

- File *knime-role.tar.gz* added

Lars Valentin wrote:

Good morning Andrea,

I just added a dummy workflow for you to be imported into KNIME for later use in ANSIBLE. Its literally an empty workflow which does nothing else then executing a node (here the table creator was choosen). The idea here is that KNIME is forced to startup with the "-clean", in order to recheck the list of all installed plugins - and to do so I run the dummy workflow. This step is very time consuming and should be applied only if plugins where changed or KNIME does behave in an unexpected way.

Got it. I don't understand if it's needed when running knime as a standalone command too.

So far I did not include an automatic update function for the plugins in ANSIBLE - my script has not been finished and is not part of the main cron job yet. Therefore, I activate and run the script over those plugins I need to update manually for now (knime_plugin_uninstall). The rule here is that a plugin must be uninstalled and then installed if you want to update a plugin - there is no straight update function available. In the near future, I want to check if a new version of an installed plugin is available and if , I use the handler to uninstall and install the new version. If you are already working on that, I would be glad if you could share your script.

Not yet. I just added the tasks that install/remove the plugins to our role, and I managed to download knime from their site.

Regarding the paths questions, we do not run a standalone KNIME in batch mode, since we use a KNIME server. Therefore, the mentioned paths in my scripts might not suit your environment. Hence if available, I expect you can avoid the KNIME executable path and invoke KNIME directly.

I don't understand this part. Do you expect us to run knime as a server?

I hope this helps to clarify things. Please, don't hesitate to contact me for updates on the status or if you face further issues. There is a FSK test workflow available in this thread - I would be glad if you could inform me as soon it does run on the dataminer.

Thank you for your effort!

KNIME 3.6 with all your listed plugins is installed on all our dataminer servers (it was a time consuming task, the plugin installation is a very slow task that sometimes fails, and we have a lot of dataminers.

I'm attaching the role I use, the handler for the dummy workflow is not integrated yet.

#26 - Sep 12, 2018 06:21 PM - Andrea Dell'Amico

@lars.valentin@bfr.bund.de any news? did you run your workflows?

#27 - Sep 13, 2018 06:04 PM - Lars Valentin

Dear Andrea,

I was assuming that you tested with the provided testworkflow above if KNIME is working and our FSKX nodes properly installed, therefore I didn't do it too.

What I see now is that the workflow fails - please refer to ticket <https://support.d4science.org/issues/12366#note-10>

When I inspected the log file (its attached i the other ticket) I found these lines:

```
[604] "WARN \t main Node\t Node can't be executed - Node \"FSKX Reader\" not available from extension \"FSK Lab Feature\" (provided by \"BfR\"; plugin \"de.bund.bfr.knime.fsklab.nodes\" is not installed) "
```

```
[605] "WARN \t main Node\t Node can't be executed - Node \"FSKX Reader\" not available from extension \"FSK Lab Feature\" (provided by \"BfR\"; plugin \"de.bund.bfr.knime.fsklab.nodes\" is not installed) "
```

```
[606] "WARN \t main Node\t Node can't be executed - Node \"FSKX Reader\" not available from extension \"FSK Lab Feature\" (provided by \"BfR\"; plugin \"de.bund.bfr.knime.fsklab.nodes\" is not installed) "
```

```
[607] "INFO \t main BatchExecutor\t Workflow execution done Finished in 9 secs (9882ms) "
```

```
[608] "INFO \t main BatchExecutor\t Saved workflow available at: /home/gcube/tomcat/webapps/wps/ecocfg/rscr_e414ab4a-2ce1-4757-96a4-8cc233cc71ee/FSKX_Model_Runner/workflow.zip"
```

```
[609] "INFO \t main BatchExecutor\t ===== Workflow did not execute successfully ====="
```

In addition the log file is now extremely long. I don't know why that is. Maybe many other plugins are not properly installed yet? Could you please open KNIME in the GUI and check if the plugins are shown there and if you get some error messages?

I also improved another KNIME workflow and it runs sometimes but often it fails - this behavior I don't see in my KNIME. I don't know what's sometimes going wrong in the DataMiner. Here you can find it if you are interested: <https://aginfra.d4science.org/group/demeter/dataminer> ->KNIME -> Get Pubmed Abstracts

Many thanks in advance
Lars

#28 - Sep 13, 2018 06:17 PM - Andrea Dell'Amico

There's no GUI available on the servers, so the command line is the only possible way to run knime. On which nodes did the workflow run, so that I can check locally?

#29 - Sep 13, 2018 06:30 PM - Lars Valentin

On one of our servers I can connect via ssh and -X window and start the KNIME in the GUI. Without that you could check the plugin folder and may send me the list.

The Testworkflow https://support.d4science.org/attachments/download/2682/simple_FSK_testworkflow.knwf from above is only using KNIME nodes and should run on its own. The workflow I created for the other ticket is similar but need an additional file as input. Therefore please test via the FSK_testworkflow. It is using the FSKX nodes only.

Thank you!

PS. I just see I did not answer questions of yours from the previous post:

Got it. I don't understand if it's needed when running knime as a standalone command too.

Ja, it forces the KNIME reassign all plugins. It helps to avoid unwanted side effects. If you never have any issue with KNIME you can leave it out and use it if you face issues. I decided I never want to face side effects again and I save a lot of time in trouble shooting with the -clean always on in plugins are installed (otherwise its not needed).

I don't understand this part. Do you expect us to run knime as a server?

No I don't. I was just mentioning that my ANSIBLE script has to differ in some parts since we have a real server and don't need to run KNIME in batch mode - it was just to make u aware, that for example the paths might differ.

#30 - Sep 13, 2018 06:33 PM - Lars Valentin

Lars Valentin wrote:

On one of our servers I can connect via ssh and -X window and start the KNIME in the GUI. Without that you could check the plugin folder and may send me the list.

The Testworkflow https://support.d4science.org/attachments/download/2682/simple_FSK_testworkflow.knwf from above is only using KNIME nodes and should run on its own. The workflow I created for the other ticket is similar but needs an additional file as input. Therefore please test via the FSK_testworkflow. It is using the FSKX nodes only.

Thank you!

PS. I just see I did not answer questions of yours from the previous post:

Got it. I don't understand if it's needed when running knime as a standalone command too.

Ja, it forces KNIME to reassign all plugins. It helps to avoid unwanted side effects. If you never have any issue with KNIME you can leave it out and use it if you face issues. I decided I never want to face side effects again and I save a lot of time in trouble shooting with the '-clean' always on if plugins are installed (otherwise it is not needed).

I don't understand this part. Do you expect us to run knime as a server?

No I don't. I was just mentioning that my ANSIBLE script has to differ in some parts since we have a real server and don't need to run KNIME in batch mode - it was just to make u aware, that for example the paths might differ.

#31 - Sep 13, 2018 11:08 PM - Andrea Dell'Amico

Lars Valentin wrote:

On one of our servers I can connect via ssh and -X window and start the KNIME in the GUI.

We do not install the Xwindow libraries, so there's no way to run the KNIME GUI.

Without that you could check the plugin folder and may send me the list.

Attached. I run the provisioning again on some hosts, and I see that at least one plugin installation always fails.

The Testworkflow https://support.d4science.org/attachments/download/2682/simple_FSK_testworkflow.knwf from above is only using KNIME nodes and should run on its own. The workflow I created for the other ticket is similiar but need an additional file as input. Therefore please test via the FSK_testworkflow. It is using the FSKX nodes only.

Thank you!

PS. I just see I did not answer questions of yours from the previous post:

Got it. I don't understand if it's needed when running knime as a standalone command too.

Ja, it forces the KNIME reassign all plugins. It helps to avoid unwanted side effects. If you never have any issue with KNIME you can leave it out and use it if you face issues. I decided I never want to face side effects again and I save a lot of time in trouble shooting with the '-clean always on if plugins are installed (otherwise its not needed).

Now the workflow is run every time a plugin is removed or installed. I see that it fails because of a missing class:

```
Caused by: java.lang.ClassNotFoundException: org.apache.aries.blueprint.NamespaceHandler cannot be found by or
g.apache.cxf.cxf-rt-frontend-jaxrs_3.0.7
    at org.eclipse.osgi.internal.loader.BundleLoader.findClassInternal(BundleLoader.java:484)
    at org.eclipse.osgi.internal.loader.BundleLoader.findClass(BundleLoader.java:395)
    at org.eclipse.osgi.internal.loader.BundleLoader.findClass(BundleLoader.java:387)
    at org.eclipse.osgi.internal.loader.ModuleClassLoader.loadClass(ModuleClassLoader.java:150)
    at java.lang.ClassLoader.loadClass(ClassLoader.java:357)
    ... 139 more
```

I don't know if it should be made available by some plugin, I see

```
/opt/knime/knime_distribution/plugins/org.apache.cxf_2.7.12.v201805071222
/opt/knime/knime_distribution/plugins/org.knime.ext.cxf.webservice_3.6.0.v201807090906.jar
```

No I don't. I was just mentioning that my ANSIBLE script has to differ in some parts since we have a real server and don't need to run KNIME in batch mode - it was just to make u aware, that for example the paths might differ.

OK.

#32 - Sep 14, 2018 08:47 AM - Lars Valentin

- File RLOGb03859c9-dfca-411b-8980-df22a4cf60ab.txt added

Good morning,

the missing class might come from one of the plugins - I am wondering if we should for bugfixing start with a miniset of plugins and add then more over the time, to see when the issues appear?

```
/opt/knime/knime_distribution/plugins/org.knime.ext.cxf.webservice_3.6.0.v201807090906.jar
```

this seems to be related to the KNIME WebService Client Node which does not exists in KNIME 3.6 anymore - it is deprecated.

The most important nodes are ours and the logfile says they are still absent?

```
[600] "Datum: 14.09.2018 07:50:45.222"
```

```
[601] "\tvor gc"
```

```
[602] ""
```

```
[603] "WARN \t main Node\t Invalid default file: "
```

```
[604] "WARN \t main Node\t Node can't be executed - Node \"FSKX Reader\" not available from extension \"FSK La  
b Feature\" (provided by \"BfR\"; plugin \"de.bund.bfr.knime.fsklab.nodes\" is not installed) "
```

```
[605] "WARN \t main Node\t Node can't be executed - Node \"FSKX Reader\" not available from extension \"FSK La  
b Feature\" (provided by \"BfR\"; plugin \"de.bund.bfr.knime.fsklab.nodes\" is not installed) "
```

```
[606] "WARN \t main Node\t Node can't be executed - Node \"FSKX Reader\" not available from extension \"FSK La  
b Feature\" (provided by \"BfR\"; plugin \"de.bund.bfr.knime.fsklab.nodes\" is not installed) "
```

```
[607] "INFO \t main BatchExecutor\t Workflow execution done Finished in 8 secs (8694ms) "
```

This is the repository: https://dl.bintray.com/silebat/fsklab_icpmf

Did you successfully run my testworkflow?

Do you use my FSK_testworkflow now instead of the dummy? Good idea!

Do you use KNIME 4.6.0 or 4.6.1?

Do you always uninstall a plugin before installing it again?

Attached. I run the provisioning again on some hosts, and I see that at least one plugin installation always fails.

Where did you attach the list?

Which plugin fails?

I am also wondering about this:

```
[603] "WARN \t main Node\t Invalid default file: "
```

The variable should be overwritten by the one provided via the DataMiner?

We have had offered a while ago to provide a zip file with KNIME preconfigured - we can still do that in order to test.

#33 - Sep 14, 2018 10:13 AM - Lars Valentin

- File *simple_FSK_testworkflow.knwf* added

- File *RLOGa305b8e6-6f0e-450f-8ecc-3b6cafce34a8.txt* added

I created a new version of the FSKX-Testworkflow. It creates as an output the file 'image.png'.

I installed this one in the Dataminer under https://aginfra.d4science.org/group/rakip_portal/data-miner with the name Fskx T E S T.

It failes and the missing nodes are mentioned in the log.

I attach both.

#34 - Sep 14, 2018 12:39 PM - Andrea Dell'Amico

- File *knime_plugins.txt* added

Sorry, I forgot the attachment. It's there now. We are installing KNIME 4.6.0, FYI.

#35 - Sep 14, 2018 01:14 PM - Lars Valentin

Andrea Dell'Amico wrote:

Sorry, I forgot the attachment. It's there now. We are installing KNIME 4.6.0, FYI.

Thank you! I see the files are there, but it looks like KNIME itself is not aware of them?
As a test, you could change the repository from

```
https://dl.bintray.com/silebat/fsklab_icpmf
```

to

```
https://dl.bintray.com/silebat/lars
```

in order to uninstall and then install the fsklab plugin. If the whole process including '-clean' runs through without issues it should work.

What do you think about my other thoughts from above?

#36 - Sep 14, 2018 01:20 PM - Andrea Dell'Amico

I'm out of office today, I'll elaborate in the next days.

#37 - Sep 18, 2018 05:57 PM - Andrea Dell'Amico

The deployment variables for the plugins are the following:

```
knime_plugin_uninstall: []
#- de.bund.bfr.knime.fsklab.feature.feature.group
```

```
knime_plugin_repository: "http://update.knime.org/analytics-platform/{{ knime_update_version }},http://update.knime.org/store/{{ knime_update_version }},http://update.knime.org/community-contributions/trusted/{{ knime_update_version }},http://update.knime.org/community-contributions/{{ knime_update_version }},https://dl.bintray.com/silebat/fsklab_icpmf,https://github.com/SiLeBAT/Other/raw/master/de.bund.bfr.knime.other.aaw.feet/update,https://dl.bintray.com/silebat/pmmmlab,http://dl.bintray.com/silebat/generic,http://dl.bintray.com/silebat/internal/"
```

```
knime_plugin_install:
- org.knime.features.testingapplication.feature.group
- org.knime.features.datageneration.feature.group #KNIME Data Generation http://update.knime.com/analytics-platform/3.6 Lars
- org.knime.features.base.filehandling.feature.group #KNIME File Handling Nodes http://update.knime.com/analytics-platform/3.6 Lars
- org.knime.features.r.feature.group #KNIME Interactive R Statistics Integration http://update.knime.com/analytics-platform/3.6 Lars
```

```

- org.knime.features.base.feature.group #KNIME Core http://update.knime.com/analytics-platform/3.6 Lars
- org.knime.features.ext.jfreechart.feature.group #KNIME JFreeChart http://update.knime.com/analytics-platform/3.6 Lars
- org.knime.features.ext.svg.feature.group #KNIME SVG Support http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.webservice.client.feature.group #KNIME Web Service Client http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.virtual.feature.group #KNIME Virtual Nodes http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.textprocessing.feature.group #KNIME Textprocessing http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.textprocessing.language.german.feature.group #KNIME Textprocessing German Language Pack http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.textprocessing.language.spanish.feature.group #KNIME Textprocessing Spanish Language Pack http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.textprocessing.language.french.feature.group #KNIME Textprocessing French Language Pack http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.stats2.feature.group #KNIME Statistics Nodes (Labs) http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.socialmedia.feature.group #KNIME Social Media Connectors (Twitter & Google) http://update.knime.com/analytics-platform/3.6 Matthias
- com.knime.features.reporting.designer.feature.group #KNIME Report Designer http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.webanalytics.feature.group #KNIME Webanalytics http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.python2.feature.group #KNIME Python Integration http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.perl.feature.group #KNIME Perl Integration http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.optimization.feature.group #KNIME Optimization extension http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.osm.feature.group #KNIME Open Street Map Integration http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.network.feature.group #KNIME Network Mining http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.network.distmatrix.feature.group #KNIME Network Mining distance matrix support http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.neighborgram.feature.group #KNIME Neighborgram & ParUni http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.distmatrix.feature.group #KNIME Distance Matrix http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.itemset.feature.group #KNIME Itemset Mining http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.lucene.feature.group #KNIME Indexing and Searching http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.birt.feature.group #KNIME HTML/PDF Writer http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.exttool.feature.group #KNIME External Tool Support http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.arima.feature.group #KNIME Autoregressive integrated moving average (ARIMA) http://update.knime.com/analytics-platform/3.6 Matthias
- org.knime.features.ext.exttool.feature.group #KNIME External Tool Support http://update.knime.com/analytics-platform/3.6 Matthias
- de.bund.bfr.knime.fsklab.feature.feature.group #FSK Lab Feature https://dl.bintray.com/silebat/fsklab_icpmf Lars
# - de.bund.bfr.knime.fsklab.legacy.feature.feature.group #Legacy FSK-Lab nodes https://dl.bintray.com/silebat/fsklab_icpmf Lars
- de.bund.bfr.knime.pmm.base.feature.group #PMM Nodes https://dl.bintray.com/silebat/pmm/ Lars
- de.bund.bfr.knime.gis.feature.feature.group #KNIME Nodes for GIS and Graph Visualization http://dl.bintray.com/silebat/generic/ Lars Warenstrominfo
- de.bund.bfr.knime.other.aaw.feats.feature.group #ZoMoPlugin-OtherFeats_aaw https://github.com/SiLeBAT/Other/raw/master/de.bund.bfr.knime.other.aaw.feats/update Alex Mibi-Portal
### - de.bund.bfr.knime.internal.feature.feature.group #Rhome and editable node http://dl.bintray.com/silebat/internal/ Alex RiskRanking
- de.nbi.cibi.feature.feature.group #de.NBI - CIBI Extension http://update.knime.com/community-contributions/3.6 M. Flor
- org.knime.knip.feature.feature.group #KNIME Image Processing http://update.knime.com/community-contributions/3.6 M. Filter AGINFRA

```

I'm going to reinstall a single node and catch all the installation logs.

#38 - Sep 18, 2018 06:45 PM - Andrea Dell'Amico

- File knime-dummy.log added

I reinstalled all the de.bund.* plugins, then I run the dummy workflow again. The result is attached.

#39 - Sep 19, 2018 03:46 PM - Lars Valentin

Hey Andrea,

if Ansible run flawlessly through all these steps it should work in the end - but unfortunately it does not.
In your log are several errors mentioned:

```
INFO      main BatchExecutor  ===== Executing workflow /opt/knime/knime_workflows/dummy =====
ERROR     main BatchExecutor  Workflow is locked by another KNIME instance
INFO      main BatchExecutor  ===== Workflow did not execute sucessfully =====
```

```
error: XDG_RUNTIME_DIR not set in the environment.
```

```
java.lang.NoClassDefFoundError: org/apache/aries/blueprint/NamespaceHandler
```

Since, there is no FSK mentioned I assume you did not change the dummy with the FSKX testworkflow I provided you above, in order to test if FSK works after the installation.

I did that and checked the workflow in the dataminer and I receive the old error message that the nodes are not available/installed.

In order to get a system running right now, I manually created for you a version of a working KNIME version with only FSK plugins installed by doing the following steps on a Linux computer to be finally placed in the VRE DM to replace your version for now:

1. Downloading the KNIME https://download.knime.org/analytics-platform/linux/knime-latest-linux.gtk.x86_64.tar.gz
2. Extracting the file tar -xvzf knime_3.6.1.linux.gtk.x86_64.tar.gz
3. changing the knime.ini from value -Xmx2048m to -Xmx8g (if you can offer more RAM in the DM tell here)
4. run KNIME GUI ./knime
5. set webproxy if needed I switched in General Network to manual and added webproxy 8080 for HTTP and HTTPS to meet BfR requirements
6. install our minimal requirement of plugins as explained here https://foodrisklabs.bfr.bund.de/fsk-lab_de/
~~~ (only!!!!) FSK Lab Feature from [https://dl.bintray.com/silebat/fsklab\\_icpmf](https://dl.bintray.com/silebat/fsklab_icpmf) (needs the R 3.4 and the packages Rserve and miniCRAN) ~~~  
and restart KNIME
7. import the workflows [https://support.d4science.org/attachments/download/2682/simple\\_FSK\\_testworkflow.knwf](https://support.d4science.org/attachments/download/2682/simple_FSK_testworkflow.knwf) and <https://support.d4science.org/attachments/download/2713/dummy.knwf> and check both if they run properly through!
8. zipping with tar czf FSK\_KNIME\_3.6.1.tar.gz Downloads/knime\_3.6.1

If this version works on your test machine you can check on the cluster infrastructure too. Hopefully this way we can see if it does work at all and then evolve later to a fully functional ANSIBLE driven KNIME.

Here is the link:

```
https://download.xOFoblIr@download.bfr.bund.de/downloads/u2KoMIvZ/
```

Best Lars

### #42 - Sep 24, 2018 01:03 PM - Andrea Dell'Amico

The workflow still fails. I've found the following thread, that can maybe give some hints? <https://forum.knime.com/t/excutable-in-batch-mode/10779/6>

```
/opt/Downloads/knime_3.6.1/knime -nosplash -clean -reset -application org.knime.product.KNIME_BATCH_APPLICATION
ON -workflowDir='/opt/knime/knime_workflows/dummy'
CompilerOracle: exclude javax/swing/text/GlyphView.getBreakSpot
Sep 24, 2018 1:02:46 PM org.apache.cxf.bus.osgi.CXFExtensionBundleListener addExtensions
INFO: Adding the extensions from bundle org.apache.cxf.cxf-rt-transport-http (127) [org.apache.cxf.transport.
http.HTTPTransportFactory, org.apache.cxf.transport.http.HTTPWSDLExtensionLoader, org.apache.cxf.transport.htt
p.policy.HTTPClientAssertionBuilder, org.apache.cxf.transport.http.policy.HTTPServerAssertionBuilder, org.apac
he.cxf.transport.http.policy.NoOpPolicyInterceptorProvider]
INFO      main BatchExecutor  ===== Executing workflow /opt/knime/knime_workflows/dummy =====
ERROR     main BatchExecutor  Workflow is locked by another KNIME instance
INFO      main BatchExecutor  ===== Workflow did not execute sucessfully =====
Sep 24, 2018 1:02:54 PM org.apache.cxf.bus.osgi.CXFExtensionBundleListener unregister
INFO: Removing the extensions for bundle 127
error: XDG_RUNTIME_DIR not set in the environment.
Knime: Cannot open display:
Knime:
JVM terminated. Exit code=3
/opt/Downloads/knime_3.6.1/plugins/org.knime.binary.jre.linux.x86_64_1.8.0.152-01/jre/bin/java
-server
-Dsun.java2d.d3d=false
-Dosgi.classloader.lock=classname
-XX:+UnlockDiagnosticVMOptions
-XX:+UnsyncloadClass
-Dsun.net.client.defaultReadTimeout=0
```

```
-XX:CompileCommand=exclude, javax/swing/text/GlyphView, getBreakSpot
-Xmx8g
-Dorg.eclipse.swt.internal.gtk.disablePrinting
-jar /opt/Downloads/knime_3.6.1/plugins/org.eclipse.equinox.launcher_1.4.0.v20161219-1356.jar
-os linux
-ws gtk
-arch x86_64
-launcher /opt/Downloads/knime_3.6.1/knime
-name Knime
--launcher.library /opt/Downloads/knime_3.6.1/plugins/org.eclipse.equinox.launcher.gtk.linux.x86_64_1.1.551.v
20171108-1834/eclipse_1630.so
-startup /opt/Downloads/knime_3.6.1/plugins/org.eclipse.equinox.launcher_1.4.0.v20161219-1356.jar
--launcher.overrideVmargs
-exitdata 400002
-clean
-reset
-application org.knime.product.KNIME_BATCH_APPLICATION
-workflowDir=/opt/knime/knime_workflows/dummy
-vm /opt/Downloads/knime_3.6.1/plugins/org.knime.binary.jre.linux.x86_64_1.8.0.152-01/jre/bin/java
-vmargs
-server
-Dsun.java2d.d3d=false
-Dosgi.classloader.lock=classname
-XX:+UnlockDiagnosticVMOptions
-XX:+UnsyncloadClass
-Dsun.net.client.defaultReadTimeout=0
-XX:CompileCommand=exclude, javax/swing/text/GlyphView, getBreakSpot
-Xmx8g
-Dorg.eclipse.swt.internal.gtk.disablePrinting
-jar /opt/Downloads/knime_3.6.1/plugins/org.eclipse.equinox.launcher_1.4.0.v20161219-1356.jar
```

#### #43 - Sep 24, 2018 04:34 PM - Lars Valentin

Hey Andrea,

looks promising for me. I don't have the locked workflow issue.

I tried /home/Valentin/Downloads/knime\_3.6.1/knime -nosplash -clean -reset -application org.knime.product.KNIME\_BATCH\_APPLICATION -workflowDir=/home/Valentin/knime-workspace/dummy'

and I get a long weird thing about something missing with blueprint (I will write KNIME about that) and in the end:

```
INFO      main BatchExecutor  ===== Executing workflow /home/Valentin/knime-workspace/dummy =====
INFO      main BatchExecutor  Workflow execution done Finished in 1 sec (1163ms)
INFO      main BatchExecutor  ===== Workflow executed sucessfully =====
```

same happens with the FSK-test-workflow - it works

I read about the workflow locked and they mentioned the lock-file ".knimeLock" which needs to be removed after execution from the workspace folder. Maybe something went wrong? I read it here

<https://forum.knime.com/t/how-to-remove-lock-all-batch-processes-suddenly-locked-by-another-knime-instance/4040/3>

Sometimes in network structures it seems to be not removed automatically.

HTH

Lars

Here you can read about the ticket - seems to be a new issue since 3.6.

<https://forum.knime.com/t/knime-analytics-platform-v-3-6-error-in-batch-mode/11838>

#### #44 - Sep 25, 2018 07:05 PM - Andrea Dell'Amico

The only lock files I see are the ones listed (3.6.0 is from our installation, 3.6.1 is your tar file):

```
./knime/knime_3.6.0/p2/org.eclipse.equinox.p2.engine/profileRegistry/KNIMEProfile.profile/.lock
./knime/knime_3.6.0/configuration/org.eclipse.core.runtime/.manager/.fileTableLock
./knime/knime_3.6.0/configuration/org.eclipse.equinox.app/.manager/.fileTableLock
./knime/knime_3.6.0/configuration/org.eclipse.osgi/.manager/.fileTableLock
./Downloads/knime_3.6.1/p2/org.eclipse.equinox.p2.engine/profileRegistry/KNIMEProfile.profile/.lock
./Downloads/knime_3.6.1/configuration/org.knime.core/root.lock
./Downloads/knime_3.6.1/configuration/org.eclipse.core.runtime/.manager/.fileTableLock
./Downloads/knime_3.6.1/configuration/org.eclipse.equinox.app/.manager/.fileTableLock
./Downloads/knime_3.6.1/configuration/org.eclipse.osgi/.manager/.fileTableLock
```

I removed them, anyway. I'm going to run other tests with your workflows.



**#45 - Sep 25, 2018 07:32 PM - Andrea Dell'Amico**

I run both the workflows, they still fail and there's always the message related to the lock file.

We are stalled, so that's my proposal: put your public ssh key into your user profile on the d4science portal (under My Account -> Custom fields) and I'll give you access to one of the dev dataminer (the installations are identical on all the dev, preprod and production environments) so that you can experiment directly on one of the target servers. Are you OK with that?

**#49 - Sep 26, 2018 09:55 AM - Matthias Filter**

- Due date changed from Aug 03, 2018 to Oct 24, 2018

Unfortunately this does not work as our IT does not allow communication via ssh.

In addition I have to stress that we are not IT system engineers, so we are for sure the wrong persons to solve this server side problem.

I suggest that you do the following debugging approach:

- 1.: try to install the latest plain KNIME without any extensions - in whatever way you want. Test if this KNIME installation works (you can use all the sample KNIME workflows CNR has created in the past).
- 2.: If 1) works try to install one of the trusted community KNIME extensions or even better an extension from KNIME itself. Again test if this KNIME still works.
- 3.: If 2) works try to install FSK-Lab. If this fails there might be an issue in our FSK-Lab code that creates the problem. You should then provide information what the issue might be, e.g. from the error logs.

BTW: as you know, KNIME is open source. So it should be possible to even look into the source code in case step 1 or 2 creates problems.

HTH

**#50 - Sep 26, 2018 12:09 PM - Leonardo Candela**

@matthias.filter@bfr.bund.de @lars.valentin@bfr.bund.de I'm wondering you can start a dialogue with the KNIME team, I assume you are in contact with them.

Such a technology is neither mastered from CNR nor from BfR.

We can make a try with a plain installation of KNIME and **with your collaboration we can test it.**

**#52 - Sep 26, 2018 06:33 PM - Andrea Dell'Amico**

- Status changed from In Progress to Feedback

- % Done changed from 50 to 100

Matthias Filter wrote:

Unfortunately this does not work as our IT does not allow communication via ssh.

In addition I have to stress that we are not IT system engineers, so we are for sure the wrong persons to solve this server side problem.

I suggest that you do the following debugging approach:

- 1.: try to install the latest plain KNIME without any extensions - in whatever way you want. Test if this KNIME installation works (you can use all the sample KNIME workflows CNR has created in the past).
- 2.: If 1) works try to install one of the trusted community KNIME extensions or even better an extension from KNIME itself. Again test if this KNIME still works.

I just run some of the example workflows from the KNIME site using *our* distribution, ansible provisioned (so 3.6.0, with all the plugins you requested installed). I'm attaching one of the executions. All of them worked, without any lock problems. The CXF errors are still present, but as

@lars.valentin@bfr.bund.de noted they seem to be a *feature* of the 3.6 release. They do not harm the execution.

- 3.: If 2) works try to install FSK-Lab. If this fails there might be an issue in our FSK-Lab code that creates the problem. You should then provide information what the issue might be, e.g. from the error logs.

It's what I did in the past days, see the older comments.

But I've found the problem with your workflows: they fail because of the format. Apparently, knime is not able to successfully run a workflow starting from an archive (.knwf) file. I unzipped both of your workflow files, and now they both run successfully.

So keep in mind for the future submissions, that the workflows must be expanded before their execution.

**#53 - Sep 26, 2018 06:35 PM - Andrea Dell'Amico**

- File 060401\_loop.log added

**#54 - Sep 26, 2018 07:09 PM - Leonardo Candela**

- Assignee changed from \_InfraScience Systems Engineer to Lars Valentin

This is definitely a good news.

If I get it correctly, the FSK lab files (including the encoding of a model as a KNIME workflow) need to be expanded before being executed. This is a very important detail to be known when implementing the workflow enacting the simulation.

@lars.valentin@bfr.bund.de / @matthias.filter@bfr.bund.de I guess we can close this ticket now and focus on the rest of activities aiming at exploiting the instances of this facility.

Please, let us know how you plan to handle future releases of the technology.

#### #55 - Sep 27, 2018 12:03 PM - Matthias Filter

- Assignee changed from Lars Valentin to Leonardo Candela

Thx for the efforts and the progress.

Two questions:

- 1): Would it be a big issue for you to install KNIME 3.6.1 ? (FSK-Lab is now developed to be compliant to the latest KNIME release and I would want to avoid strange behaviour just because of issues on this side.)
- 2): Is this new version (3.6.0 incl. all extensions) already available for the DM? And do I have to specify there somehow which KNIME instance should be used for execution of the WFs?

Re the question on the versioning policy: there are imho several points to consider:

- 1.: the metadata schema (FSK-ML) that FSK-Lab supports will be updated in the coming weeks. Then we will also release a new version of FSK-Lab, however all old FSKX files / workflows should still be valid, as we try to be backward compatible.
- 2.: FSK-Lab itself will always take up new KNIME releases, so it can be expected that at least 2 times a year there will be a new KNIME and FSK-Lab version.
- 3.: In the VRE we are of course independent from that and we could decide that for the rest of the project we will stick to KNIME 3.6.1 as long as we can still update the FSK-Lab extension whenever there is the need due to 1). However if the update of KNIME is not a big effort on your side we would prefer to always have the latest KNIME version in the VRE as well (e.g. to benefit from their bug fixes).

Thx and HTH.

#### #56 - Sep 27, 2018 06:32 PM - Lars Valentin

Leonardo Candela wrote:

This is definitely a good news.

Indeed!

If I get it correctly, the FSK lab files (including the encoding of a model as a KNIME workflow) need to be expanded before being executed. This is a very important detail to be known when implementing the workflow enacting the simulation.

That's not correct. The FSKX files are container we create, they contain all data and files around the model itself. This container should be only unzipped if you need to access the files in there.

What Andrea was referring to was the direct use of a .knwf file (KNime WorkFlow).

The line I was using for the batch mode looked like

```
/home/Valentin/Downloads/knime_3.6.1/knime -nosplash -clean -reset -application org.knime.product.KNIME_BATCH_APPLICATION -workflowDir='/home/Valentin/knime-workspace/dummy'
```

As I described above in [#note-39](#) step 7 this should work flawlessly after IMPORTING the workflow.

If the workflow was not imported (or as Andrea stated simply extracted) the log file should give immediately response 'THIS IS NO DIRECTORY', since parameter -workflowDir= was used.

I was wondering about that, since in the DATAMINER you always perform the batch mode on the file and I realized that you there do the correct line using the file mode '-workflowFile=':

```
Knime computation
/usr/local/bin/knime -reset -consoleLog -nosplash -application org.knime.product.KNIME_BATCH_APPLICATION -workflowFile=FSKX_Model_Runner.knwf -destFile=workflow.zip -workflow.variable=inputFile, "/home/gcube/tomcat/tmp/inputFile_[FSKX_MODEL_RUNNER_ID_54b3d065-3d14-4d61-b4e4-04ce9a177472].csv", String
computation finished
```

Therefore, there is still no explanation for me for your locked workflow issue, but the knowledge to do it right was always on your side. I did spend a lot of time on that to help you with detailed explanations, even if we don't use the batch mode at all, since we use a KNIME server.

Regarding our FSK plugin, we just released today a new version, which might also help to solve your installation issue. Could you please uninstall and reinstall them through the KNIME installer and test the provided workflows with the batch mode and in the DATAMINER and give feedback on that?

@lars.valentin@bfr.bund.de / @matthias.filter@bfr.bund.de I guess we can close this ticket now and focus on the rest of activities aiming at exploiting the instances of this facility.

Please, let us know how you plan to handle future releases of the technology.

I would like to suggest, that you install the latest version 3.6.1 for now. Updating future versions as soon as they are available (bugfixes) would make sense to me, but you should not install a new major version 3.7 without checking in with us. Same as for R 4.4, since R 4.5 does not work with our plugins.

Regarding our FSK plugin, this one should be always updated automatically from the icpmf update site as soon as available. Since it is under development, we quite often release a new version.

It would be helpful for us if you could send a kind of a newsletter to us via the support email address, to inform us about all recent changes in the infrastructure we depend on (like new FSK build installed).

Many thanks in advance

Lars

I would like to add, that I just run my FSKX test workflows in the RAKIP Dataminer and it said the nodes are not installed. I hope this will be solved with our newest release of the FSK plugin.

#### #57 - Sep 28, 2018 02:42 PM - Leonardo Candela

Dear @lars.valentin@bfr.bund.de and @matthias.filter@bfr.bund.de

the effort and time needed to install another version of KNIME will be reported by @andrea.dellamico@isti.cnr.it (he is currently away from the office and will reply as soon as feasible). From a previous comment (i.e. [#12249#note-22](#)) I see that the installation is time consuming ... we have a number of machines to be configured.

I can only observe that it is really a pity to have spent some months to install a version of a technology without having the possibility / plan to make any use of it. This is not to blame someone, bad things happen.

BTW, my proposal is the following:

- create a *new ticket to request the installation of the 3.6.1 version* ... this way we can follow this new task in the future;
  - I hope that the rest of activities will not be blocked waiting for 3.6.1;
- *every change* to the version of KNIME supported / available by the infrastructure *should be triggered by a new ticket* ... CNR will not deploy automatically any minor release of KNIME since we do not know in advance whether the new version will prevent previously imported "algorithms" from working;
- regarding the automatic update of the FSK plugin, this is doable and I understand the rationale. We trust the retro-compatibility, i.e. we hope that new versions of the plugin will not prevent existing FSK models from working. Otherwise we risk to have an "unstable" environment;

Regarding the way KNIME has been integrated in DataMiner and the need to "import" the workflows to be executed. We can work together to improve the batch mode invocation of KNIME if this is needed / expected. Dunno if in the case of FSK files there are extra steps to do.

#### #58 - Oct 01, 2018 03:19 PM - Andrea Dell'Amico

Leonardo Candela wrote:

the effort and time needed to install another version of KNIME will be reported. From a previous comment (i.e. [#12249#note-22](#)) I see that the installation is time consuming ... we have a number of machines to be configured.

I can only observe that it is really a pity to have spent some months to install a version of a technology without having the possibility / plan to make any use of it. This is not to blame someone, bad things happen.

BTW, my proposal is the following:

- create a *new ticket to request the installation of the 3.6.1 version* ... this way we can follow this new task in the future;
  - I hope that the rest of activities will not be blocked waiting for 3.6.1;
- *every change* to the version of KNIME supported / available by the infrastructure *should be triggered by a new ticket* ... CNR will not deploy automatically any minor release of KNIME since we do not know in advance whether the new version will prevent previously imported "algorithms" from working;

Yes, the ticket is needed. The operation is very time consuming, but I guess that for a minor release servers running the current and the new version can cohesist until the upgrade is finished.

- regarding the automatic update of the FSK plugin, this is doable and I understand the rationale. We trust the retro-compatibility, i.e. we hope that new versions of the plugin will not prevent existing FSK models from working. Otherwise we risk to have an "unstable" environment;

I'll add a cron job that reinstall the plugin every day.

#59 - Oct 01, 2018 03:23 PM - Andrea Dell'Amico

Lars Valentin wrote:

What Andrea was referring to was the direct use of a .knwf file (KNime WorkFlow).

The line I was using for the batch mode looked like

```
/home/Valentin/Downloads/knime_3.6.1/knime -nosplash -clean -reset -application org.knime.product.KNIME_BATCH_APPLICATION -workflowDir='/home/Valentin/knime-workspace/dummy'
```

As I described above in [#note-39](#) step 7 this should work flawlessly after IMPORTING the workflow.

If the workflow was not imported (or as Andrea stated simply extracted) the log file should give immediately response 'THIS IS NO DIRECTORY', since parameter -workflowDir= was used.

Nope, because the directory exists: the knime workflow file was placed inside that directory.  
The error message was completely misleading, otherwise the

I was wondering about that, since in the DATAMINER you always perform the batch mode on the file and I realized that you there do the correct line using the file mode '-workflowFile=':

```
Knime computation
/usr/local/bin/knime -reset -consoleLog -nosplash -application org.knime.product.KNIME_BATCH_APPLICATION -
workflowFile=FSKX_Model_Runner.knwf -destFile=workflow.zip -workflow.variable=inputFile, "/home/gcube/tomcat/tmp/inputFile_[FSKX_MODEL_RUNNER_ID_54b3d065-3d14-4d61-b4e4-04ce9a177472].csv",String
computation finished
```

I didn't know anything about the way dataminer runs a KNIME workflow. I assumed that the command was the same I used. I'm unarchiving your test workflow files in the next playbook run, so the test workflow should work from now on.

#62 - Oct 04, 2018 11:59 AM - Leonardo Candela

- Status changed from Feedback to Closed

Since everything is working as reported in [#12578](#) I'm going to close this ticket and to say thank you to all the people contributing to it.

Files

|                                              |         |              |                   |
|----------------------------------------------|---------|--------------|-------------------|
| simple_FSK_testworkflow.knwf                 | 39 KB   | Jul 26, 2018 | Lars Valentin     |
| VRE_KNIME_Server_Plugin_List.xlsx            | 11.9 KB | Jul 26, 2018 | Lars Valentin     |
| ANSIBLEstuff                                 | 8.42 KB | Jul 31, 2018 | Lars Valentin     |
| dummy.knwf                                   | 3.02 KB | Aug 31, 2018 | Lars Valentin     |
| knime-role.tar.gz                            | 2.63 KB | Aug 31, 2018 | Andrea Dell'Amico |
| RLOGb03859c9-dfca-411b-8980-df22a4cf60ab.txt | 482 KB  | Sep 14, 2018 | Lars Valentin     |
| simple_FSK_testworkflow.knwf                 | 41.9 KB | Sep 14, 2018 | Lars Valentin     |
| RLOGa305b8e6-6f0e-450f-8ecc-3b6cafce34a8.txt | 483 KB  | Sep 14, 2018 | Lars Valentin     |
| knime_plugins.txt                            | 92 KB   | Sep 14, 2018 | Andrea Dell'Amico |
| knime-dummy.log                              | 30.8 KB | Sep 18, 2018 | Andrea Dell'Amico |
| 060401_loop.log                              | 29.6 KB | Sep 26, 2018 | Andrea Dell'Amico |