

IFE1602 install step

1. Down Load IFE1602.zip

Down load IFE1602.zip from Fix Central:

<http://www.ibm.com/support/fixcentral/quickorder?product=ibm%2FOther+software%2FIBM+Insights+Foundation+for+Energy&fixids=IBMIFE-1.6.0.2-Linux-IFE1602&source=SAR>

2. Apply fixpack on bi node

2.1 Update Cognos

Log on bi node.

1. Copy IFE1602/AssetHealth_Fix/Cognos/cognos/IFEReport.zip to bi node.
Copy <AssetHealth_Fix>/Cognos/cognos/images/dgabackground.png to bi node.
2. Replace dgabackground.png in cognos web content image folder, the default location is: /opt/ibm/cognos/analytics/webcontent/images
3. Replace IFEReport.zip in cognos deployment folder, the default location is: /opt/ibm/cognos/analytics/deployment on bi server.
4. Open <http://<bi node>:9300/ibmcognos>, go to Manage -> administration console -> content administration, delete the old import item created previously, and re-create a new one then to import IFEReport again.

IBM Cognos Administration

Status Security **Configuration** Library Multitenant

Data Source Connections

Content Administration

Distribution Lists and Contacts

Printers

Styles

Portlets

Dispatchers and Services

Query Service Caching

Administration

<input type="checkbox"/>	Name ↕
<input type="checkbox"/>	IFEReport_Import ←
<input type="checkbox"/>	IBMPMQ.zip

Last refresh time: May 30, 2016 9:42:34 PM

Select a deployment archive - New Import wizard

Select the deployment archive from which to get the entries to import. If the archive is encrypted, you will be prompted to enter the password.

Deployment archive

The location of the deployment archive is set using the deployment files location in IBM Cognos Configuration.

<input type="radio"/>	Name ↕
<input checked="" type="radio"/>	IFEReport
<input type="radio"/>	Templates

Cancel < Back Next > Finish

Specify a name and description - New Import wizard

Specify a name and location for the deployment specification. You can also specify a des

Name:

Description:

Screen tip:

Location:

Administration

Select another location...

Cancel

< Back

Next >

Finish

Select the public folders, directory and library content - New Import wizard

Select one or more packages, folders, directory or library content and select the options to include in the import.

Public folders, directory and library content

Change the target name of packages and folders if you do not want to overwrite them in the target with packages and folders from the deployment archive.
Disable the packages or folders if you do not want users to access them in the target after the import.

<input type="checkbox"/>	...> Name	...> Target name	<input type="checkbox"/> Disable after import	In target content	Modified
<input checked="" type="checkbox"/>	/// IFEReport	/// IFEReport	<input type="checkbox"/>	✓	May 26, 2016 5:5

Options

Include report output versions

Conflict resolution:

- Keep existing entries
- Replace existing entries

Include run history

Conflict resolution:

- Keep existing entries
- Replace existing entries

Include schedules

Conflict resolution:

- Keep existing entries
- Replace existing entries

Cancel

< Back

Next >

Finish

Specify the general options - New Import wizard

Specify the options applicable to all the entries in the import. You can also select the options applicable to the deployment record.

Access permissions

- Include access permissions
- Apply to new entries only
 - Apply to new and existing entries

External namespaces

- Include references to external namespaces
- Do not include references to external namespaces

Entry ownership

Set the owner to:

- The owner from the source
- The user performing the import

Apply to:

- New entries only
- New and existing entries

Deployment record

Recording level:

Select the level of detail to save in the deployment record.

Basic ▾

Cancel

< Back

Next >

Finish

Select an action - New Import wizard

Select whether you want to run, schedule, or save only, when the wizard closes.

Action:

- Save and run once
- Save and schedule
- Save only

Cancel

< Back

Next >

Finish


Run with options - IFEReport_Import



Specify when you want to run this import.

Time:

Now

Later:

Oct 11, 2016 

11 : 36 AM 


Content:

Name
<input checked="" type="checkbox"/> Content store
<input checked="" type="checkbox"/> IFEReport

Report specification upgrade:

You may want to keep existing report specification versions for compatibility with existing applications.

Upgrade all report specifications to the latest version

Keep the existing report specification versions

Store IDs:

Selecting 'Do not assign new IDs during import' could result in content being overwritten and lost.

Assign new IDs during import


Do not assign new IDs during import

view the run history, make sure it is run successfully.


View run history - IFEReport_Import

View the run history for this entry.

Status:

All statuses 

Entries: 1 - 1  |    

Request time	Start time	Completion time	Status	Actions
October 11, 2016 11:36:54 AM	October 11, 2016 11:36:54 AM	October 11, 2016 11:36:56 AM	Succeeded	

2.2 Update Ask on bi node

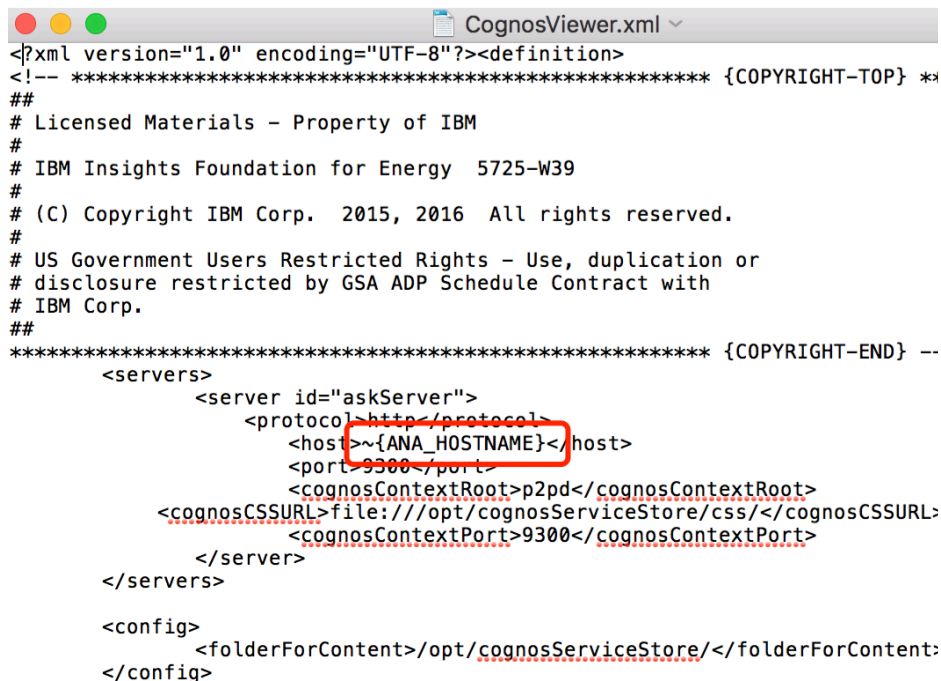
1. copy IFE1602/AssetHealth_Fix/ASK/ask_server/apps/ASK_ear.ear to /opt/ibm/cognos/analytics/wlp/usr/servers/ask_server/apps/ on bi node.

2. backup /opt/cognosServiceStore/config/CognosViewer.xml

3. copy

IFE1602/AssetHealth_Fix/ASK/cognosServiceStore/config/CognosViewer.xml to /opt/cognosServiceStore/config/ on bi node

4. Change the ANA_HOSTNAME to the bi node's hostname.



```
<?xml version="1.0" encoding="UTF-8"?><definition>
<!-- ***** {COPYRIGHT-TOP} ****
##
# Licensed Materials - Property of IBM
#
# IBM Insights Foundation for Energy 5725-W39
#
# (C) Copyright IBM Corp. 2015, 2016 All rights reserved.
#
# US Government Users Restricted Rights - Use, duplication or
# disclosure restricted by GSA ADP Schedule Contract with
# IBM Corp.
##
***** {COPYRIGHT-END} --
  <servers>
    <server id="askServer">
      <protocol>http</protocol>
      <host>~{ANA_HOSTNAME}</host>
      <port>9300</port>
      <cognosContextRoot>p2pd</cognosContextRoot>
      <cognosCSSURL>file:///opt/cognosServiceStore/css/</cognosCSSURL>
      <cognosContextPort>9300</cognosContextPort>
    </server>
  </servers>
  <config>
    <folderForContent>/opt/cognosServiceStore/</folderForContent:
  </config>
```

5. restart ask server

```
/opt/ibm/cognos/analytics/wlp/bin/server stop ask_server
```

```
/opt/ibm/cognos/analytics/wlp/bin/server start ask_server
```

3. Apply fix pack on iib node

3.1 Update ear and wars

Log on iib node.

Assume user choose the default install location for liberty. The default location is /opt/IBM/WebSphere/Liberty/. If you didn't use default directory when installing liberty, please change correspondingly.

1. Delete the old ear and wars on iib node

```
cd /opt/IBM/WebSphere/Liberty/usr/servers/framework_server/apps/  
rm -rf ife_frwk_app.ear  
rm -rf ife_aha_app.ear  
rm -rf wind_page.war  
rm -rf wind_web.war  
rm -rf wind_data_simulator.war
```

2. Copy the ears and wars to iib node

Copy the IFE1602/Framework_Fix/liberty_server/apps/ife_frwk_app.ear to the iib folder: /opt/IBM/WebSphere/Liberty/usr/servers/framework_server/apps/

Copy the IFE1602/AssetHealth_Fix/liberty_server/apps/ife_aha_app.ear to the iib folder: /opt/IBM/WebSphere/Liberty/usr/servers/framework_server/apps/

Copy the IFE1602/WIND_Fix/liberty_server/apps/wind_page.war to the iib folder: /opt/IBM/WebSphere/Liberty/usr/servers/framework_server/apps/

Copy the IFE1602/WIND_Fix/liberty_server/apps/wind_web.war to the iib folder: /opt/IBM/WebSphere/Liberty/usr/servers/framework_server/apps/

Copy the IFE1602/WIND_Fix/liberty_server/apps/wind_data_simulator.war to the iib folder: /opt/IBM/WebSphere/Liberty/usr/servers/framework_server/apps/

3. Run the script to unzip the ear and wars

Copy the IFE1602/AssetHealth_Fix/CD_install_application.sh to /tmp folder on iib node.

```
dos2unix /tmp/CD_install_application.sh  
chmod +x /tmp/CD_install_application.sh  
/tmp/CD_install_application.sh
```

3.2 Update the background image and nls file.

1. Run these commands:

```
cd  
/opt/IBM/WebSphere/Liberty/usr/servers/framework_server/apps/ife_frwk_app.ear/if  
e_frwk_web.war/images/login/  
mv ioc_login_background_19201280.jpg ioc_login_background_19201280.jpg.bk
```

```
mv backup_ioc_login_background_19201280.jpg
ioc_login_background_19201280.jpg
```

2. vi

```
/opt/IBM/WebSphere/Liberty/usr/servers/framework_server/apps/ife_frwk_app.ear/ife_frwk_web.war/js/nls/AdminUI.js
```

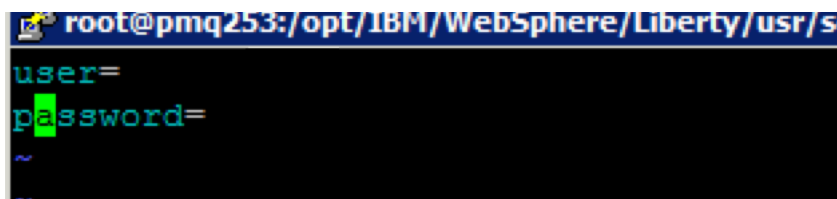
change the "login_project_title" item from "Product name" to "Insights Foundation for Energy" .

3.3 Update the weather.properties on iib node

1. run the command to config the weather.properties:

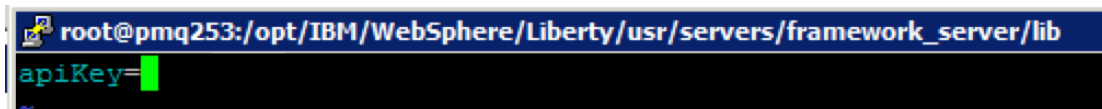
```
vi /opt/IBM/WebSphere/Liberty/usr/servers/framework_server/lib/weather.properties
```

2. delete the two lines below



```
root@pmq253:/opt/IBM/WebSphere/Liberty/usr/s
user=
password=
~
```

add one line "apiKey=", and enter your own api key behind the '='



```
root@pmq253:/opt/IBM/WebSphere/Liberty/usr/servers/framework_server/lib
apiKey=
~
```

3. run script to encrypt the apiKey: -

```
/opt/IBM/energy/AssetHealth/SPSS_stream/lib/encrypt.sh
```

```
/opt/IBM/WebSphere/Liberty/usr/servers/framework_server/lib/weather.properties
```

```
apiKey aes
```

4. restart framework server: -

```
/opt/IBM/WebSphere/Liberty/bin/server stop framework_server
```

```
/opt/IBM/WebSphere/Liberty/bin/server start framework_server
```

4. Apply fix pack on spss node

Log on spss node.

Assume user choose the default install location for IBM energy directory. The default location is /opt/IBM/energy/. If you didn't use default directory when installing liberty, please change correspondingly.

Assume user choose the default install location for IBM SPSS modeler batch. The default location is /usr/IBM/SPSS/ModelerBatch/18.0/. If you didn't use default directory when installing modelerbatch , please change correspondingly.

Assume user choose the default install location for IBM SPSS modeler server. The default location is /opt/IBM/SPSS/ModelerServer/18.0/. If you didn't use default directory when installing liberty, please change correspondingly.

4.1 Update the modelersrv_18_0

1. Copy the IFE1602/18.0-IM-S18MODELERS--Linux8664-IF004/modelersrv_18_0 to spss node.
2. backup the old file: -
`mv /opt/IBM/SPSS/ModelerServer/18.0/modelersrv_18_0 /opt/IBM/SPSS/ModelerServer/18.0/modelersrv_18_0.bak`
3. Copy the new modelersrv_18_0 to the folder:
`mv <path of the file>/modelersrv_18_0 /opt/IBM/SPSS/ModelerServer/18.0/modelersrv_18_0`
4. Run the command: -
`chmod +x /opt/IBM/SPSS/ModelerServer/18.0/modelersrv_18_0`

4.2 Replace the SPSS stream

1. Copy IFE1602/AssetHealth_Fix/Analysis/SPSS/SPSS_stream to spss node.
2. Rename /opt/IBM/energy/AssetHealth/SPSS_stream for backupfirst: -
`mv /opt/IBM/energy/AssetHealth/SPSS_stream /opt/IBM/energy/AssetHealth/SPSS_stream.bak`
3. Copy the SPSS_stream folder you just copied to /opt/IBM/energy/AssetHealth/
4. Run the commands: -
`dos2unix /opt/IBM/energy/AssetHealth/SPSS_stream/script/*`
`chmod 777 -R /opt/IBM/energy/AssetHealth/SPSS_stream/`
5. Stop grid engine: -
`/opt/IBM/energy/grid_engine/ife_aoms_core/scripts/grid_engine.sh stop`
Then execute below command and check if any grid engine process still exists, if yes kill it.
`ps -def | grep 16088`
6. Copy IFE1602/AssetHealth_Fix/Analysis/grid_engine to spss node.

7. Backup the grid_engine.cfg file
`mv /opt/IBM/energy/grid_engine/ife_aoms_core/scripts/grid_engine.cfg to /opt/IBM/energy/grid_engine/`
8. Copy and replace IFE1602/AssetHealth_Fix/Analysis/grid_engine/ife_aoms_core.tar.gz to folder /opt/IBM/energy/grid_engine/ on spss node.
9. Delete old ife_aoms_core folder and run:-
`rm -rf ife_aoms_core`
`tar -zxvf ife_aoms_core.tar.gz`
10. Copy backup grid_engine.cfg from /opt/IBM/energy/grid_engine back to /opt/IBM/energy/grid_engine/ife_aoms_core/scripts/
11. Execute:-
`dos2unix /opt/IBM/energy/grid_engine/ife_aoms_core/scripts/run_cfp.sh`
`chmod 777 /opt/IBM/energy/grid_engine/ife_aoms_core/scripts/run_cfp.sh`
12. Start grid engine: -
`/opt/IBM/energy/grid_engine/ife_aoms_core/scripts/grid_engine.sh start`

4.3 Edit cfg file content

1. Edit /opt/IBM/energy/AssetHealth/SPSS_stream/script/modelerServer.cfg by changing hostname (host of modeller server), password (pw of root)
Change modelerBatch=/opt/IBM/SPSS/ModelerBatch/17.0/ to modelerBatch=/usr/IBM/SPSS/ModelerBatch/18.0/

2. Edit /opt/IBM/energy/AssetHealth/SPSS_stream/script/streamParams.cfg by changing dspwd (pw of db2inst1)

3. Encrypt the password in cfg files.

Note: plain text is ok, or user can also use encrypt.sh like following to encrypt password.

you can use the command below to encrypt the two cfg files:

```
/opt/IBM/energy/AssetHealth/SPSS_stream/lib/encrypt.sh
/opt/IBM/energy/AssetHealth/SPSS_stream/script/modelerServer.cfg
password aes
/opt/IBM/energy/AssetHealth/SPSS_stream/lib/encrypt.sh
/opt/IBM/energy/AssetHealth/SPSS_stream/script/streamParams.cfg dspwd
aes
```

After the encrypt, please have a check on the

/opt/IBM/energy/AssetHealth/SPSS_stream/script/streamParams.cfg. If there are unneeded code in the cfg, like the follow, please delete them.

```

dsname=IFEDB
dsuser=db2inst1
dspwd={aes}z2CUZ0ZjFNfe1/QPh+7GEA==
-log /opt/IBM/energy/AssetHealth/SPSS_stream/log/AHBacth.log=null
-appendlog=

# asset health scoring streams
[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Pole/Pole_TTarget_Failure_Thresh
old.str]=
poleTTargetModelTrainingOrPrediction=2
TTargetModelFile=/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Pole/TTARGET.qm
poleTTargetOutputFile=/opt/IBM/energy/AssetHealth/SPSS_stream/score_input/Pole_T
Target_Failure_Threshold.csv
analysisYearFile=/opt/IBM/energy/AssetHealth/SPSS_stream/score_input/years.txt

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Pole/Pole_Health.str]=
inputFolder=/opt/IBM/energy/AssetHealth/SPSS_stream/score_input
csvFolder=/opt/IBM/energy/AssetHealth/SPSS_stream/score
logFolder=/opt/IBM/energy/AssetHealth/SPSS_stream/log

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/SubstationTransformer/ST_DGA_Cat
egory.str]=
stDGACatgOutputFile=/opt/IBM/energy/AssetHealth/SPSS_stream/score_input/ST_DGA_C
ategory.csv

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/SubstationTransformer/ST_Thermal
_Protected_Aging.str]=
analysisYearFile=/opt/IBM/energy/AssetHealth/SPSS_stream/score_input/years.txt
</AssetHealth/SPSS_stream/script/streamParams.cfg" 86L, 4561C 6,1 Top

```

After the deletion, the file should look like below:

```

root@pmq253:/opt/IBM/energy/AssetHealth
dsuser=db2inst1
dspwd={aes}z2CUZ0ZjFNfe1/QPh+7GEA==
-log /opt/IBM/energy/AssetHealth/SPSS_stream/log/AHBacth.log
-appendlog

# asset health scoring streams
[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Pole/Pole_TTarget_Failure_Thresh
old.str]
poleTTargetModelTrainingOrPrediction=2
TTargetModelFile=/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Pole/TTARGET.qm
poleTTargetOutputFile=/opt/IBM/energy/AssetHealth/SPSS_stream/score_input/Pole_T
Target_Failure_Threshold.csv
analysisYearFile=/opt/IBM/energy/AssetHealth/SPSS_stream/score_input/years.txt

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Pole/Pole_Health.str]
inputFolder=/opt/IBM/energy/AssetHealth/SPSS_stream/score_input
csvFolder=/opt/IBM/energy/AssetHealth/SPSS_stream/score
logFolder=/opt/IBM/energy/AssetHealth/SPSS_stream/log

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/SubstationTransformer/ST_DGA_Cat
egory.str]
stDGACatgOutputFile=/opt/IBM/energy/AssetHealth/SPSS_stream/score_input/ST_DGA_C
ategory.csv

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/SubstationTransformer/ST_Thermal
_Protected_Aging.str]
analysisYearFile=/opt/IBM/energy/AssetHealth/SPSS_stream/score_input/years.txt
STThermalProjectedAgeingOutputFile=/opt/IBM/energy/AssetHealth/SPSS_stream/score
_input/ST_Thermal_Protected_Ageing.csv

```

4.4 Restart modeler server

```
/opt/IBM/SPSS/ModelerServer/18.0/modelersrv.sh stop  
/opt/IBM/SPSS/ModelerServer/18.0/modelersrv.sh start
```

4.5 Add disk space if needed

/opt should have more than 60G

4.6 Update SPSS parameter template file if needed

To use SPSS to do the asset health analysis, first backup and modify
/opt/IBM/energy/AssetHealth/SPSS_stream/script/stream_assetHealth.cfg as
following:-

This file identifies which streams need to be executed when running SPSS analysis. Some of those streams are placed into folders named with asset class code. They are asset class related stream. While other streams are not placed into such folders, they are common streams.

For the asset class related streams, please make sure to remove them if you have no related asset class data loaded. Please remove them according to following rules:-

A. if you don't have pole data loaded, please delete

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Pole/Pole_TTarget_Failure_Threshold.str](#)

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Pole/Pole_Health.str](#)

and

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Pole/Pole_Treatment.str](#)

B. if you don't have substation transformer data loaded, please delete

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/SubstationTransformer/ST_DGA_Category.str](#)

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/SubstationTransformer/ST_Thermal_Projected_Aging.str](#)

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/SubstationTransformer/ST_Health.str](#)

and

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/SubstationTransformer/ST_Treatment.str](#)

C. if you don't have distribution transformer data loaded, please delete

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/DistributionTransformer/DT_Projectected_Ageing.str](#)

[/opt/IBM/energy/AssetHealth/SPSS_stream/stream/DistributionTransformer/DT_Health.str](#)

and

`/opt/IBM/energy/AssetHealth/SPSS_stream/stream/DistributionTransformer/DT_Treatment.str`

D. if you don't have overhead cable data loaded, please delete

`/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Cable/OverheadCable/OHC_Health.str`

and

`/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Cable/OverheadCable/OHC_Treatment.str`

E. if you don't have underground cable data loaded, please delete

`/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Cable/UndergroundCable/UGC_Health.str`

and

`/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Cable/UndergroundCable/UGC_Treatment.str`

F. if you don't both overhead or underground cable data loaded, please delete

`/opt/IBM/energy/AssetHealth/SPSS_stream/stream/Cable/Cable_Health_Status.str`

4.7 Trigger AHA analysis

To use SPSS to do the asset health analysis, issue

`/opt/IBM/energy/grid_engine/ife_aoms_core/scripts/run_cfp.sh` (Need to first make sure reading data and asset data loaded!!)