How to	Configuration – Add a new Data Entry Group
Description	Step by step description of how extend the configuration with a new Data Entry Group
Comments	The *italic* phrases correspond to the red markings in the screenshots. Please be aware that the screenshots may deviate slightly from the application
version	2015-02

Overview of steps:

1. Update meta data with proper content of columns DATA_ENTRY, DATA_ENTRY_SEQ, DATA_ENTRY_PARAMS for the new data entry group
2. Copy file LocastionSets_de.xml and edit
    a. Search and replace 'de.' with '<region>.'
    b. Search and replace 'de2MDBC_OPS' with '<region>2MDBC_OPS'
    c. Search and replace 'de2HYDRO' with '<region>2HYDRO'
    d. Search and replace 'de2EWSRC_RO' with <region>2EWSRC_RO'
    e. For LocationSet Goolwa.sites change "<attributeExists id="DATA_ENTRY_PARAMS"/>" to <attributeTextContains id=" DATA_ENTRY" contains="Goolwa"></attributeTextContains>
    f. (Un)comment parameter sections when a particular parameter is (not) available for this data entry group, but not for Menindee
3. Edit Filters_DataEntry.xml
    a. Copy filter Menindee_DataEntry and update
    b. Copy filters Menindee_DataEntry_<par> and update
    c. Add filters <region>_DataEntry_<par> when missing compared to the locationSets. Make sure to use the right timeSeriesSetsId, and to add the id of the new filter to <region>_DataEntry under foreignKey
    d. (Un)comment parameter sections when a particular parameter is (not) available for this data entry group, but not for Menindee
4. Copy file TopologyGroup_Menindee.xml and update
5. Edit file Topology.xml and update
6. Edit file DisplayGroups_opoDataEntry.xml
    a. Copy DisplayGroup Menindee_OPO and update
    b. (Un)comment parameter sections when a particular parameter is (not) available for this data entry group, but not for Menindee
7. Start application and review error messages on missing locationsets. Repeat step 2c, 3c and 6c to remove any errors.

This instruction uses XMLSpy. Relevant shortscuts:

Alt+V+G	Grid View
Alt+V+T	Text View
Ctrl+H	Search and Replace
Ctrl+K	Comment/Uncomment (when in text view)

<u>Example when adding Dartmouth as new data entry group</u>

Folder Config/MapLayerFiles

Ad. 1. Update ROWS_Locations.csv

Folder Config/RegionConfigFiles/DataEntry

Ad 2: Copy file LocationSets_de.xml → LocationSets_Dartmouth.xml

Open file LocationSets_Dartmouth.xml in XMLSpy

a) (Ctrl+H) Search and replace all (case sensitive, including dot) 'de.' → 'Dartmouth.'

b) (Ctrl+H) Search and replace all (case sensitive) 'de2MDBC_OPS.' → 'Dartmouth2MDBC_OPS.'

c) Your data entry group may have less parameters than Menindee. Select the full block for this parameter to comment (Ctrl+K) when a particular parameter is not available for this data entry group, while it is available for Menindee

Select the block in Grid View

locationSet (46)

	id	description	locationSetId	constraints
1	Dartmouth.sites	Data entry sites	sites	constraints
2	Dartmouth.sites_EVAP	Evaporation data entry sites	Dartmouth.sites	constraints
3	Dartmouth.sites_P	Precipitation data entry sites	Dartmouth.sites	constraints

Go to Text View (Alt+V+T)

```
</locationSet>
<locationSet id="Dartmouth.sites_EVAP">
  <description>Evaporation data entry sites</description>
  <locationSetId>Dartmouth.sites</locationSetId>
  <constraints>
    <attributeTextContains id="DATA_ENTRY_PARAMS" contains="EVAP"/>
  </constraints>
</locationSet>
<locationSet id="Dartmouth.sites_P">
```

Comment (Ctrl +K)

```
</locationSet>
<!--<locationSet id="Dartmouth.sites_EVAP">
  <description>Evaporation data entry sites</description>
  <locationSetId>Dartmouth.sites</locationSetId>
  <constraints>
    <attributeTextContains id="DATA_ENTRY_PARAMS" contains="EVAP"/>
  </constraints>
</locationSet>-->
<locationSet id="Dartmouth.sites_P">
```

Back to grid view (Alt+V+G)

d) Your data entry group may have more parameters than Menindee. Select the full block for this parameter to uncomment (Ctrl+K) when a particular parameter is (not) available for this data entry group, but not for Menindee

Select the block in Grid View

locationSet (46)

	id	description	locationSetId	constraints
1	Dartmouth.sites	Data entry sites	sites	constraints
2	Dartmouth.sites_EVAP	Evaporation data entry sites	Dartmouth.sites	constraints
3	Dartmouth.sites_P	Precipitation data entry sites	Dartmouth.sites	constraints

Go to Text View (Alt+V+T)

```
</locationSet>
<locationSet id="Dartmouth.sites_EVAP">
  <description>Evaporation data entry sites</description>
  <locationSetId>Dartmouth.sites</locationSetId>
  <constraints>
    <attributeTextContains id="DATA_ENTRY_PARAMS" contains="EVAP"/>
  </constraints>
</locationSet>
<locationSet id="Dartmouth.sites_P">
```

Comment (Ctrl +K)

```
</locationSet>
<!--<locationSet id="Dartmouth.sites_EVAP">
  <description>Evaporation data entry sites</description>
  <locationSetId>Dartmouth.sites</locationSetId>
  <constraints>
    <attributeTextContains id="DATA_ENTRY_PARAMS" contains="EVAP"/>
  </constraints>
</locationSet>-->
<locationSet id="Dartmouth.sites_P">
```

Back to grid view (Alt+V+G)

Folder Config/RegionConfigFiles/DataEntry

Ad 3: Open file Filters_DataEntry.xml in XMLSpy

Go to Grid Mode (Alt+V+G)

a) Copy filter Menindee_DataEntry and paste after this section. Select the filter just copied and replace within this selection: Menindee-->Dartmouth

timeSeriesSets (42)

filter (3)

	id	name	Comment	child
1	DataEntry	Mobile data entry (demo)		child (1)
2	Menindee_DataEntry	Menindee	<child foreignKey="Menindee_DataEntry_AT"/>	child (11)

timeSeriesSets (42)

filter (3)

	id	name	Comment	child
1	DataEntry	Mobile data entry (demo)		child (1)
2	Menindee_DataEntry	Menindee	<child foreignKey="Menindee_DataEntry_AT"/>	child (11)
3	Dartmouth_DataEntry	Dartmouth	<child foreignKey="Dartmouth_DataEntry_AT"/>	child (11)

For each Parameter in the data entry group

b) Copy filter Menindee_DataEntry_<par> and paste. Select the filter just copied and replace within this selection: Menindee-->Dartmouth

filter (22)

	id	name	validationIconsVisible	timeSeriesSetsId	locationConstraints
1	Menindee_DataEntry_EVAP	Evaporation	true	DataEntry_EVAP	locationConstraints
2	Menindee_DataEntry_P	Precipitation	true	DataEntry_P	locationConstraints
3	Menindee_DataEntry_WT	Water Temperature	true	DataEntry_WT	locationConstraints
4	Menindee_DataEntry_H	Water Level	true	DataEntry_H	locationConstraints
5	Menindee_DataEntry_V	Storage Volume	true	DataEntry_V	locationConstraints
6	Menindee_DataEntry_EC	Electrical Conductivity	true	DataEntry_EC	locationConstraints
7	Menindee_DataEntry_DO	Dissolved Oxygen	true	DataEntry_DO	locationConstraints
8	Menindee_DataEntry_DOpct	Dissolved Oxygen (%)	true	DataEntry_DOpct	locationConstraints
9	Menindee_DataEntry_Q	Discharge/Flow	true	DataEntry_Q	locationConstraints
10	Menindee_DataEntry_QRL	Release Flow	true	DataEntry_QRL	locationConstraints
11	Menindee_DataEntry_QDIV_irrig	Diverted Flow (irrigation)	true	DataEntry_QDIV.irrig	locationConstraints

filter (22)

	id	name	validationIconsVisible	timeSeriesSetsId	locationConstraints
1	Menindee_DataEntry_EVAP	Evaporation	true	DataEntry_EVAP	locationConstraints
2	Menindee_DataEntry_P	Precipitation	true	DataEntry_P	locationConstraints
3	Menindee_DataEntry_WT	Water Temperature	true	DataEntry_WT	locationConstraints
4	Menindee_DataEntry_H	Water Level	true	DataEntry_H	locationConstraints
5	Menindee_DataEntry_V	Storage Volume	true	DataEntry_V	locationConstraints
6	Menindee_DataEntry_EC	Electrical Conductivity	true	DataEntry_EC	locationConstraints
7	Menindee_DataEntry_DO	Dissolved Oxygen	true	DataEntry_DO	locationConstraints
8	Menindee_DataEntry_DOpct	Dissolved Oxygen (%)	true	DataEntry_DOpct	locationConstraints
9	Menindee_DataEntry_Q	Discharge/Flow	true	DataEntry_Q	locationConstraints
10	Menindee_DataEntry_QRL	Release Flow	true	DataEntry_QRL	locationConstraints
11	Menindee_DataEntry_QDIV_irrig	Diverted Flow (irrigation)	true	DataEntry_QDIV.irrig	locationConstraints
12	Dartmouth_DataEntry_EVAP	Evaporation	true	DataEntry_EVAP	locationConstraints
13	Dartmouth_DataEntry_P	Precipitation	true	DataEntry_P	locationConstraints
14	Dartmouth_DataEntry_WT	Water Temperature	true	DataEntry_WT	locationConstraints
15	Dartmouth_DataEntry_H	Water Level	true	DataEntry_H	locationConstraints
16	Dartmouth_DataEntry_V	Storage Volume	true	DataEntry_V	locationConstraints
17	Dartmouth_DataEntry_EC	Electrical Conductivity	true	DataEntry_EC	locationConstraints
18	Dartmouth_DataEntry_DO	Dissolved Oxygen	true	DataEntry_DO	locationConstraints
19	Dartmouth_DataEntry_DOpct	Dissolved Oxygen (%)	true	DataEntry_DOpct	locationConstraints
20	Dartmouth_DataEntry_Q	Discharge/Flow	true	DataEntry_Q	locationConstraints
21	Dartmouth_DataEntry_QRL	Release Flow	true	DataEntry_QRL	locationConstraints
22	Dartmouth_DataEntry_QDIV_irrig	Diverted Flow (irrigation)	true	DataEntry_QDIV.irrig	locationConstraints

c) Your data entry group may have less parameters than Menindee. Select the full block for this parameter to comment (Ctrl+K) when a particular parameter is not available for this data entry group, but is available for Menindee

d) Your data entry group may have more parameters than Menindee. Copy filter Dartmouth_DataEntry_EVAP and paste. Within this new filter replace 'EVAP' by the new parameter. Make sure you use an entry as defined in the list of timeSeriesSets at the top of the file (see 3rd screenshot).

filter (22)

	id	name	validatio...	timeSeriesSetsId	locationConstraints
1	Menindee_DataEntry_EVAP	Evaporation	true	DataEntry_EVAP	locationConstraints
2	Menindee_DataEntry_P	Precipitation	true	DataEntry_P	locationConstraints
3	Menindee_DataEntry_WT	Water Temperature	true	DataEntry_WT	locationConstraints
4	Menindee_DataEntry_H	Water Level	true	DataEntry_H	locationConstraints
5	Menindee_DataEntry_V	Storage Volume	true	DataEntry_V	locationConstraints
6	Menindee_DataEntry_EC	Electrical Conductivity	true	DataEntry_EC	locationConstraints
7	Menindee_DataEntry_DO	Dissolved Oxygen	true	DataEntry_DO	locationConstraints
8	Menindee_DataEntry_DOpct	Dissolved Oxygen (%)	true	DataEntry_DOpct	locationConstraints
9	Menindee_DataEntry_Q	Discharge/Flow	true	DataEntry_Q	locationConstraints
10	Menindee_DataEntry_QRL	Release Flow	true	DataEntry_QRL	locationConstraints
11	Menindee_DataEntry_QDIV_irrig	Diverted Flow (irrigation)	true	DataEntry_QDIV.irrig	locationConstraints
12	Dartmouth_DataEntry_EVAP	Evaporation	true	DataEntry_EVAP	locationConstraints
13	Dartmouth_DataEntry_P	Precipitation	true	DataEntry_P	locationConstraints

filter (24)

	id	name	validatio...	timeSeriesSetsId	locationConstraints
1	Menindee_DataEntry_EVAP	Evaporation	true	DataEntry_EVAP	locationConstraints
2	Menindee_DataEntry_P	Precipitation	true	DataEntry_P	locationConstraints
3	Menindee_DataEntry_WT	Water Temperature	true	DataEntry_WT	locationConstraints
4	Menindee_DataEntry_H	Water Level	true	DataEntry_H	locationConstraints
5	Menindee_DataEntry_V	Storage Volume	true	DataEntry_V	locationConstraints
6	Menindee_DataEntry_EC	Electrical Conductivity	true	DataEntry_EC	locationConstraints
7	Menindee_DataEntry_DO	Dissolved Oxygen	true	DataEntry_DO	locationConstraints
8	Menindee_DataEntry_DOpct	Dissolved Oxygen (%)	true	DataEntry_DOpct	locationConstraints
9	Menindee_DataEntry_Q	Discharge/Flow	true	DataEntry_Q	locationConstraints
10	Menindee_DataEntry_QRL	Release Flow	true	DataEntry_QRL	locationConstraints
11	Menindee_DataEntry_QDIV_irrig	Diverted Flow (irrigation)	true	DataEntry_QDIV.irrig	locationConstraints
12	Dartmouth_DataEntry_EVAP	Evaporation	true	DataEntry_EVAP	locationConstraints
13	Dartmouth_DataEntry_pH	pH	true	DataEntry_pH	locationConstraints
14	Dartmouth_DataEntry_Turbidity	Turbidity	true	DataEntry_Turbidity	locationConstraints
15	Dartmouth_DataEntry_P	Precipitation	true	DataEntry_P	locationConstraints

timeSeriesSets (42)

	id	timeSeriesSet
1	DataEntry_All	timeSeriesSet (42)
2	DataEntry_H	timeSeriesSet (1)
3	DataEntry_V	timeSeriesSet (1)
4	DataEntry_P	timeSeriesSet (1)
5	DataEntry_EVAP	timeSeriesSet (1)
6	DataEntry_DO	timeSeriesSet (1)
7	DataEntry_DOpct	timeSeriesSet (1)
8	DataEntry_EC	timeSeriesSet (1)
9	DataEntry_AT	timeSeriesSet (1)
10	DataEntry_WT	timeSeriesSet (1)
11	DataEntry_EGEN	timeSeriesSet (1)
12	DataEntry_Turbidity	timeSeriesSet (1)
13	DataEntry_WindVel	timeSeriesSet (1)
14	DataEntry_WindDir	timeSeriesSet (1)
15	DataEntry_pH	timeSeriesSet (1)
16	DataEntry_Gates	timeSeriesSet (1)
17	DataEntry_Gates.rr	timeSeriesSet (1)
18	DataEntry_Gates.vs	timeSeriesSet (1)
19	DataEntry_StopLogs	timeSeriesSet (1)
20	DataEntry_FlowDir	timeSeriesSet (1)
21	DataEntry_Q	timeSeriesSet (1)
22	DataEntry_Q.spill	timeSeriesSet (1)
23	DataEntry_Q.turb	timeSeriesSet (1)
24	DataEntry_Q.valves	timeSeriesSet (1)

Folder Config/RegionConfigFiles/DataEntry

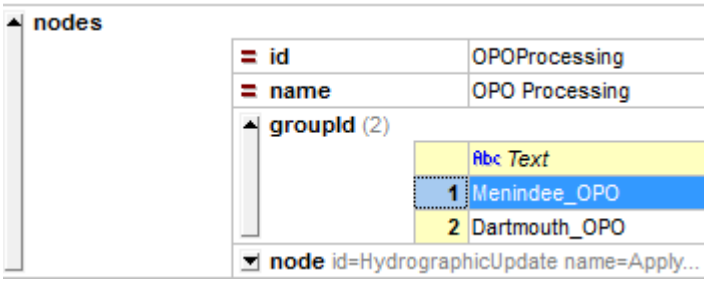
Ad 4: Copy file TopologyGroup_Menindee.xml → TopologyGroup_Dartmouth.xml
Open file TopologyGroup_Dartmouth.xml in XMLSpy

a) (Ctrl+H) Search and replace all (case sensitive) 'Menindee' → 'Dartmouth'

Folder Config/RegionConfigFiles

Ad 5: Open file Topology.xml in XMLSpy

a) Unfold in Grid View. Copy GroupId Menindee_OPO and paste.
b) Update the groupId to Dartmouth_OPO



Folder Config/SystemConfigFiles

Ad 6: Open file DisplayGroups_opoDataEntry.xml in XMLSpy

Go to Grid Mode (Alt+V+G)

a) Copy displaygroup Menindee_OPO and paste after this section. Select the display group just copied and search and replace (ctrl+H) within this selection only: Menindee-->Dartmouth