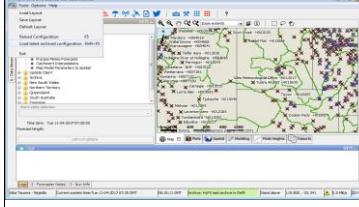
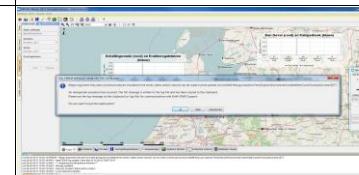


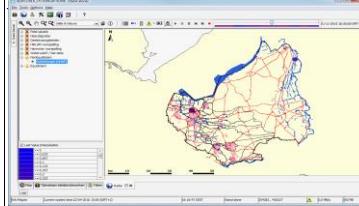
Delft-FEWS 2017.01 New Features								
Component/s	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
App - Archive	BPA	<a href="#">FEWS-16882</a>	FEWS-15003 make it possible to access elastic catalogue by the pi webservice	access the elastic catalogue by the pi webservice	In the future it will be possible to access the elastic catalogue by the pi webservice. In this release a temporary version is available. It is mainly used for demo and evaluating purposes and will be extended later to final production version.			
App - Archive	BoM (Aus)	<a href="#">FEWS-16892</a>	FEWS-15665 HyFS-Archive: improve configMetaData.xsd	Improvement of the elastic catalogue	The internal naming of the elastic catalogue and the code is improved to make it more clear what the actual fields of the catalogue mean.	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/25.+Using+the+Deltares+Open+Archive">https://publicwiki.deltares.nl/display/FEWSDOC/25.+Using+the+Deltares+Open+Archive</a>		
App - Master Controller Server, System	Deltares	<a href="#">FEWS-12952</a>	Improvement to MC restart script for Windows: does not use JAVA_HOME from registry	Improvement to MC restart script for Windows: does not use JAVA_HOME from registry	JRE home directory is now passed as an argument in the restart scripts	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/MC+Restarter+process">https://publicwiki.deltares.nl/display/FEWSDOC/MC+Restarter+process</a>		
App - Master Controller Server	Deltares	<a href="#">FEWS-16672</a>	Make config expiry time taskrun/workflow redundant. Rolling barrel should auto correct expiry times	Expiry time in workflow descriptors is now redundant	It is no longer required to configure the expiry time of workflows in the workflowDescriptors.xml or in the admin interface. The run will not expire before all produced time series / warn states and reports are expired. The amalgamate module will no longer complain about wrongly configured expiry times. The expiry time in the workflow descriptor is still used as default expiry time for simulated time series.			
App - Operator Client Gui (Explorer), Water Coach	BoM (Aus)	<a href="#">FEWS-15666</a>	FEWS-15665 HyFS-WC: Enable the SA to automatically update its configuration from PROD or UAT	Updating configuration with the latest archived configuration (SA only)	To update the configuration use File menu 'Load latest archived configuration (Shift+F5)'. Then the latest archived configuration and the associated metadata.xml will be downloaded and the currently used configuration will be replaced with the downloaded configuration.  During this process a progress monitor-popup is visible and messages are logged in Logs panel.  Also , the user might be prompted to update the configuration, if the last downloaded configuration is outdated. In this case the following message popups immediately after starting Fews: "A new version of the configuration is available in the archive. You can update the current configuration using File -> Load latest archived configuration "	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/25+WaterCoach">https://publicwiki.deltares.nl/display/FEWSDOC/25+WaterCoach</a>		
App - Operator Client Gui (Explorer)	BoM (Aus)	<a href="#">FEWS-15676</a>	FEWS-15665 HyFS: Delete localdatastore from file menu	Option to delete localdatastore from Filemenu in Explorer	Configuration option added to delete localdatastore from the File menu in the FEWS Explorer.	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/01+FEWS+Explorer#id-01FEWSExplorer-DeleteLocalDataStore">https://publicwiki.deltares.nl/display/FEWSDOC/01+FEWS+Explorer#id-01FEWSExplorer-DeleteLocalDataStore</a>		
App - Operator Client Gui (Explorer)	BoM (Aus)	<a href="#">FEWS-16324</a>	FEWS-16315 HyFS-2508: Separate relative view period for data and thresholds	Separate view period for threshold and validation icons in explorer.	Thresholds icons needs a different view period than validation icons. For example you don't want to see that data is missing for the last 15 minutes but the want to see all recent threshold crossings.			
App - Operator Client Gui (Explorer)	Water Board Noorderzijlvest	<a href="#">FEWS-12533</a>	FEWS-12539 Possibility to define a period (optional start and/or end) for which the filters should be applied.	Interactively adjust the period used the calculate the threshold/validation icons	You can now keep the default filter periods short to improve the update icons performance. In the case you want so see a longer period you can adjust the period. You can adjust the period for any level in the filter tree. The period is displayed in the in the filter tree when the underlying icons use the same period. This is always the case after adjusting the period.		no configuration required	
App - Operator Client Gui (Explorer), Configuration	Water Board Noorderzijlvest	<a href="#">FEWS-16973</a>	Attribute filter tree does not work for "multiple value" attributes	The attributes panel can now show multi value attributes.	A location attribute can have multiple values for a single location and time when a location is listed multiple times in an attribute csv file.			
App - Operator Client Gui (Explorer)	RWS (NL)	<a href="#">FEWS-16810</a>	Scheduled / batch forecast should only run on T0's corresponding to cardinal timestep	Floor time 0 to cardinal time step of workflow descriptor at start of workflow	The time 0 of a task run is now automatically set back to the last valid cardinal time step configured for the workflow descriptor. This is use full when the scheduled dispatch times do not align with the cardinal time step.			

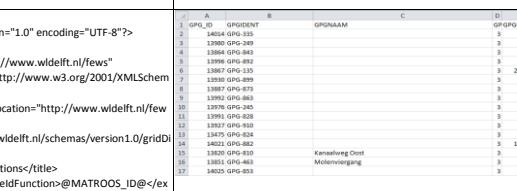
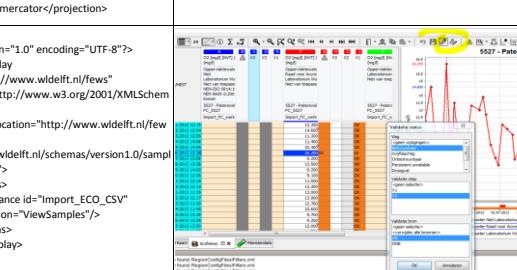
Delft-FEWS 2017.01 New Features									
Component/s	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images	
App - Operator Client Gui (Explorer)	Deltares	<a href="#">FEWS-16336</a>	GeoTools library is old, must be updated with new jar	GeoTools library updated to version 16.1		<a href="https://publicwiki.deltares.nl/display/FEWSDOC/_delft-FEWS+Copyrights+and+Credits">https://publicwiki.deltares.nl/display/FEWSDOC/_delft-FEWS+Copyrights+and+Credits</a>			
Configuration	Deltares	<a href="#">FEWS-16445</a>	Option to read z coordinates from UGRID netcdf file used in grid definition config file	Grids: Added new option zVariableName to grids config.	Grids: Added new option zVariableName to grids config for irregular UGRID grid definitions that are defined in a netcdf file. This can be used e.g. to use bottom levels as z coordinates for the grid cells, instead of using the z coordinates of the (3D) cell centers from the mesh itself.		<pre>{code:xml} &lt;regular locationId="locationWithUGrid"&gt; &lt;netcdfFile&gt; &lt;file&gt;csm13_map_grid_definition.nc&lt;/file&gt; &lt;mesh&gt;Topology&lt;variableName&gt;mesh2d&lt;/mesh&gt; &lt;opologyVariableName&gt; &lt;staggerLocation&gt;face&lt;/staggerLocation&gt; &lt;zVariableName&gt;mesh2d_FlowElem_blk/zVariableName&lt;/zVariableName&gt; &lt;/netcdfFile&gt; &lt;/irregular&gt;</pre>		
Configuration	Deltares	<a href="#">FEWS-804</a>	Prevent invalid sync levels assigned to time series sets	Sync level configuration no longer required in most cases	Configuration of sync levels 0, 1, 5 and 9 is no longer required. The default sync levels 0, 1, 5 and 9 are automatically used on write for respectively simulated, external, manual at OC and temporary. Configuration of sync level is only required when having multiple sync profiles. For example to indicate the time series contain (small/large) grids, configuring sync levels is still required, see <a href="http://publicwiki.deltares.nl/display/FEWSDOC/B+enumerations+for+all+sync+levels">http://publicwiki.deltares.nl/display/FEWSDOC/B+enumerations+for+all+sync+levels</a> . ERRORS are now logged for invalid sync levels in workflow configuration. A workflow with invalid sync levels will run till the end but will be marked as partially successful. Sync level 1 for simulated and sync level 0 for external time series results in random gaps in time series on OC. This is no longer allowed.	<a href="http://publicwiki.deltares.nl/display/FEWSDOC/B+enumerations">http://publicwiki.deltares.nl/display/FEWSDOC/B+enumerations</a>	time series set schema is unchanged		
Configuration	Waternet	<a href="#">FEWS-16520</a>	Id map allow internal id functions	The id map now supports additional attribute functions for more flexible mapping					
Configuration - ValidationStatus	Zuiderzeeland	<a href="#">FEWS-16964</a>	Store ValidationStatus selection in User Settings	Validation status selection stored in user settings	When Validation Status is configured and a data validator selects validation steps in the Validation Status Display, this selection is stored in the user_settings.ini. For a smooth data validation process, this saves clicks.	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/_26.+Validation+Status">https://publicwiki.deltares.nl/display/FEWSDOC/_26.+Validation+Status</a>			
Configuration - ValidationStatus	GO-FEWS (Selection of Dutch Waterboards)	<a href="#">FEWS-16841</a>	Allow visibilityControllingFlagSourceColumn for filters without time series sets	ValidationStatus: visibilityControllingFlagSourceColumn is now part of time series. Filters can also be based on constraints to search for time series available in the data store.	The visibilityControllingFlagSourceColumn is now part of time series. Filters can also be based on constraints to search for time series available in the data store.	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/_26.+Validation+Status">https://publicwiki.deltares.nl/display/FEWSDOC/_26.+Validation+Status</a>	<pre>{code:xml} &lt;filter id="KRW-waterlichamen"&gt; &lt;relativeViewPeriod start="-100000" end="0" unit="day"/&gt; &lt;visibilityControllingFlagSourceColumnId&gt;PUBLIC&lt;/visibilityControllingFlagSourceColumnId&gt; &lt;locationConstraints&gt; &lt;idStartsWith prefix="NL"/&gt; &lt;locationConstraint&gt; &lt;parameterConstraints&gt; &lt;idStartsWith prefix="" /&gt; &lt;parameterConstraint&gt; &lt;qualifierConstraints&gt; &lt;idStartsWith prefix="" /&gt; &lt;qualifierConstraints&gt; &lt;/filter&gt; {code}</pre>		

Delft-FEWS 2017.01 New Features								
Component/s	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Database	BoM (Aus)	<a href="#">FEWS-16323</a>	FEWS-16315 HyFS-3070: FEWS should ignore empty location sets	Ignore non existing location sets when exporting the the archive	When templates are used for exporting data to the archive it is common to construct a location set id from the area for which the export is executed. For example, The location set might be locations_5@readid). If this location set doesn't exists for a certain area than the export activity will give an error. It is now possible to ignore this situation and continue without logging errors. This behavior is configurable and can be activated by the following option ignoreNonExistingLocationSets in the general section of the export.	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/29.+Using+the+Deltares+Open+Archive">https://publicwiki.deltares.nl/display/FEWSDOC/29.+Using+the+Deltares+Open+Archive</a>	Below a snippet from the general section from the archive (code.xml) <exportObserved> <general> <archiveFolder>\$ARCHIVE_FOLDER\$</archiveFolder> <relativePeriod unit="day" start="-5" end="0"/> <idMapId>idArchive</idMapId> <ignoreNonExistingLocationSets>true</ignoreNonExistingLocationSets> </general>  (code)	
Database	Deltares	<a href="#">FEWS-16894</a>	Redundant MC tables	Removed redundant MC tables: most significantly ConfigManager ConfigRevisionStore,ConfigRevisions (migration to ConfigRevisionSets has been possible since 2011.02).	If there are old systems from before 2011_02 that need to be migrated to use ConfigRevisionSets (very unlikely) it is required to migrate before running the 2017_01 data_update script, otherwise config revision history is started afresh.  Removed obsolete ConfigManager revisions ConfigRevisionStore,ConfigRevisions (migration to ConfigRevisionSets was possible since 2011.02)  The following redundant MC tables have been removed. A. SysReports, SysReportStyles, DefaultSysReportStyles B. ConfigManConfigurations, DefaultConfigManConfigurations C. ConfigRevisionStore,ConfigRevisions (migration was possible since 2011.02) D. GlobalSynchronisationVersion, TableDeletion, TableSynchronisationVersion (synchronisation2)		Be aware as always for migration to a new release that the default synchProfiles and synchChannels need to be verified. In this case ConfigRevisions an ConfigRevisionStore have been removed from the synchChannels. When this modification is not applied to the synchChannels, synchronisation errors will occur.	
Database	Deltares	<a href="#">FEWS-16650</a>	Add extra foreign key constraints to database scripts	DB Schema has additional foreign keys for forcing database consistency.	The following relations are now being enforced (please contact FEWS support in case of unexpected foreign key failures). Timeseries to Modifiers TimeSeries.taskRunid to TaskRuns Modifiers to SystemActivities Modifiers to WhatScenarios ModuleParameterModifiers to Modifiers.			
Database	Deltares	<a href="#">FEWS-14866</a>	FewsSessions expiry time column for RollingBarrel	An expiry time column has been added to the FewsSessions table in preparation of future RollingBarrel activities.			(code.xml) <rollingbarrel> <taskruns expiredays="10"/> <fewsessions expiredays="30"/> <logentries expiredays="5"/> <reports expiredays="5"/> <default expiredays="10"/> </rollingbarrel> (code)	
Database	Deltares	<a href="#">FEWS-15866</a>	Make MsgRequester sendAndProcessReply exit on OutOfMemoryError leading to infinite loop.	Fixed ActiveMQ OutOfMemoryError leading to infinite loop.				
Database	BoM (Aus)	<a href="#">FEWS-16874</a>	FEWS-16315 Deleting records from LogEntries table	Deleting records from LogEntries table enabled	Deleting records from LogEntries table is a functionality that can be activated from ForecasterNotes display. Each forecaster note is stored in a record in LogEntries table To delete forecaster notes from LogEntries table, select the notes in the ForecasterNotes display and use the toolbar button "Delete". Then the 'delete records' functionality (RecordsPendingDeletion) removes then the associated records from the database.			
Database	Deltares	<a href="#">FEWS-16696</a>	Progress popup on reconnecting to database instead of time out error after 5 seconds	Progress popup on reconnecting to database	Progress popup on reconnecting to database instead of time out error after 5 seconds			
Database	Deltares	<a href="#">FEWS-16704</a>	DDA. Show connecting in status bar when database connection is lost	Show connecting in status bar when database connection is lost in Direct Database Connection (DDA) mode	The Delft-FEWS Explorer status bar now shows when a connection is lost when using Direct Database Connection (DDA)			

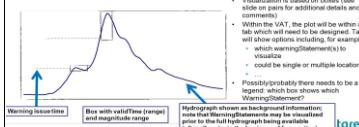
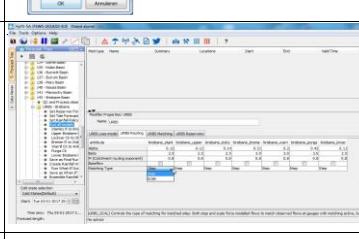
Delft-FEWS 2017.01 New Features								
Component/s	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Database	Deltares	<a href="#">FEWS-15883</a>	Add new timeSeriesType 'temporary forecast'	New time series type "Temporary External Forecasting"	new time series type "Temporary External Forecasting" This replaces an external forecast with synch level 9 with a parameter that is only used in combination with synch level 9 and not in the final result. Temporary time series are deleted at the end of a run. They are only visible for the running task run. You can now use the same parameter as used in the final result		<pre>[codexml] &lt;timeSeriesSet&gt; &lt;moduleInstanceId&gt;ImportExternalCSV&lt;/module InstancedId&gt; &lt;valueType&gt;scalar&lt;/valueType&gt; &lt;parameterId&gt;H.res.fctext&lt;/parameterId&gt; &lt;locationSetId&gt;AUS_RTC_reservoirs&lt;/locationSe tId&gt; &lt;timeSeriesType&gt;temporary external forecasting&lt;/timeSeriesType&gt; &lt;timestep unit="minute" multiplier="15"/&gt; &lt;readWriteMode&gt;add originals&lt;/readWriteMode&gt; &lt;/timeSeriesSet&gt;</pre>	
Database	Deltares	<a href="#">FEWS-16709</a>	Completed/Failed status of import runs should be written to database for SA	Completed/Failed status of import runs written to database for Standalone	In Standalone mode the completion status was lost for import runs when restarting Delft-FEWS. This status is now visible in System Monitor and the Database viewer			
Database	Deltares	<a href="#">FEWS-16746</a>	A new key object should be created every time an item is added to a cache	More accurate memory usage status	The memory usage reported in the status bar is now more accurate			
Database, System	Deltares	<a href="#">FEWS-16856</a>	Replicate to derby. Upgrade derby library to derby-10.13.1.1	The derby jdbc driver has been migrated from derby-10.8.1.2 to derby-10.13.1.1. Note that it is impossible to open a 2017.01 derby localDataStore with a 2016.02 or before.	When it is required to view a 2017.01 derby database using a 2016.02 Stand alone, it is only possible to do so by first replicating to firebird and then to rename the replica.fdb into local.fdb.			
Database	Deltares	<a href="#">FEWS-16199</a>	No longer support msaccess/derby lds created by 2013.01 or earlier	MS Access/Derby local datastores created by Delft-FEWS 2013.01 (or earlier) needs conversion	MS Access/Derby local datastores created by Delft-FEWS 2013.01 or earlier needs manual conversion with <f12> database>replicate. Error is logged when this is the case	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/The+F12+menu">https://publicwiki.deltares.nl/display/FEWSDOC/The+F12+menu</a>		
Database	ZZL	<a href="#">FEWS-16139</a>	FEWS-14055 Re-ID Tool: Open Database	Re-ID Tool works with Open Database	Re-ID Tool works with Open Database	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/14+Tips+and+Tricks#id-14TipsandTricks-Re-IDTool">https://publicwiki.deltares.nl/display/FEWSDOC/14+Tips+and+Tricks#id-14TipsandTricks-Re-IDTool</a>		
Database	GO-FEWS (Selection of Dutch Waterboards)	<a href="#">FEWS-13881</a>	FEWS-14055 Enlarge width of location/parameter/qualifier/ensemble columns to max 2000b	Re-ID Tool: the locationId, parameterId, qualifierSetId, ensembleMemberId columns in the Timeseries table have been widened from 64 to 2000 characters	More time series can be stored in a single time series blob also when they don't use short ids (location, parameter, qualifier, ensemble member) LocationId, parameterId, qualifierSetId, ensembleMemberId columns in the Timeseries table have been widened from 64 to 2000 characters. Rollback is not possible, therefore the changes are not reflected in the rollback_update scripts. Upgraded local data stores are still readable by older FEWS stand alone versions		no configuration required	
Database	BoM (Aus)	<a href="#">FEWS-16500</a>	FEWS-16033 Standardise storage of properties in FEWS database	Time series variability boxes for time and value	A start/end and min/max can now be stored along with a time/value point in the data store. These variability boxes of data points are automatically displayed in the charts as transparent rectangles. The start/end min/max are also added to the pt time series format. These variability boxes are compressed and stored in the same blob as the rest of the time	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/26+Verification+Analysis+Display">https://publicwiki.deltares.nl/display/FEWSDOC/26+Verification+Analysis+Display</a>		
Database	Deltares	<a href="#">FEWS-17009</a>	FEWS-16827 Simplify time series table queries	Performance improvements 2017.01	Performance improvements 2017.01. Internal database queries have been improved and simplified			
Debug Tool - Database Viewer	RWS	<a href="#">FEWS-17019</a>	Function for removing a taskrun and all corresponding module instances from database viewer	In (stand alone) Database viewer data written by individual module instances can be removed		<a href="https://publicwiki.deltares.nl/display/FEWSDOC/Database+Viewer">https://publicwiki.deltares.nl/display/FEWSDOC/Database+Viewer</a>		
Debug Tool - Database Viewer	Deltares	<a href="#">FEWS-16527</a>	Show task run / workflow / time0 in tsd lister when time series is written by single run	Additional information visible in Timeseries Lister (Taskrun, Workflow, Time0) when timeseries is written by single run	The time series lister from the time series dialog now also shows the run that has written the time series. This also works for external historical when zoomed in to a single import.			
Debug Tool - Workflow Navigator	TVA	<a href="#">FEWS-14781</a>	FEWS-10616 TVA: show temporary timeseries also in WFN after F12-6	Show temporary time series in workflow navigator.	For debug purposes in stand alone you can choose with the F12 menu to keep the temporary time series after a run is finished. These temporary time series are now also visible in the work flow navigator besides the database lister. The temporary series are deleted when you toggle the F12 option.			

Delft-FEWS 2017.01 New Features								
Component/A	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
MCRecoveryTool	GO-FEWS (Selection of Dutch Waterboards)	<a href="#">FEWS-14056</a>	FEWS-14055 Persistent time series ids. Option: Re-ID Tool	Persistent Location, parameter, qualifier and module instance ids.	Location, parameter, qualifier and module instance can now be changed in the configuration without effecting existing FEWS data bases, open data bases and open archives. The databases and the archive will always use the persistent ids behind the scenes. The normal ids are used everywhere else. The persistent ids that are different from the current config id are listed in separate csv files. These files can list the obsolete or false ids.	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/14+ips+and+tricks#14+ipsandtricks-RE-IDTool">https://publicwiki.deltares.nl/display/FEWSDOC/14+ips+and+tricks#14+ipsandtricks-RE-IDTool</a>	<pre>(code:xml) &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;locationSets   xmlns="http://www.wldelft.nl/fews"   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"   xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/locationSets.xsd" version="1.1"&gt;   &lt;persistentIdsCsvFile&gt;     &lt;file&gt;oldLocationsIds.csv&lt;/file&gt;   &lt;configId&gt;%CURRENT_ID%&lt;/configId&gt;   &lt;persistentId&gt;%OLD_ID%&lt;/persistentId&gt; &lt;/persistentIdsCsvFile&gt; &lt;code&gt;</pre> <pre>(code:xml) &lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;parameters   xmlns="http://www.wldelft.nl/fews"   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"   xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/parameters.xsd" version="1.0"&gt;   &lt;persistentIdsCsvFile&gt;     &lt;file&gt;oldParameterIds.csv&lt;/file&gt;</pre>	
Module Adapter - All	alberta's river forecast centre	<a href="#">FEWS-16402</a>	Kisters Hydstra adapter	Kisters Hydstra adapter available	Kisters Hydstra adapter available			
Module Adapter - SOBEK	Deltares	<a href="#">FEWS-16922</a>	Compile sobek.PreSobekModelAdapter and sobek.PostSobekModelAdapter for 64-bit	PreSobekModelAdapter and PostSobekModelAdapter are now available for windows 64 bit. The new nefis3_x64.dll is required for this and can be copied to the fews bin directory.				
Plugin - Gui - Archive Display	BoM (Aus)	<a href="#">FEWS-15673</a>	FEWS-15665 HyFS-Archive: Improve Archive Display event selection	improve event selection in archive display	In the archive display it is possible to create events and to search for events. These panels have now extended possibilities for filtering events. After double clicking on a event the events displayed will automatically be filtered for the selected value. After clicking the right mouse button a menu will be displayed with additional options for adding or removing filters.			
Plugin - Gui - Archive Display	BoM (Aus)	<a href="#">FEWS-15674</a>	FEWS-15665 HyFS-Archive: Show Archive name is Archive Display	show archive display name in the explorer toolbar	If an archive is configured the toolbar will show the name of the archive. This name will be retrieved from the archive itself. If the archive is not accessible the name section in the toolbar will be colored red otherwise the section will be colored green.			
Plugin - GUI - Forecast Mix Display	Idaho Power	<a href="#">FEWS-15781</a>	FEWS-14466 New FEWS Plugin where multiple current and non current scalar forecasts can be weighted for every time step of the current forecast period	ForecastMixer	<p>ForecastMixer is a FewsExplorer plugin and can be configured in Explorer.xml, for example as follows:</p> <pre>(code:xml) &lt;explorerTask name="ForecastMixer"&gt;   &lt;displayConfigFileName&gt;ForecastMixer&lt;/displayConfigFileName&gt;   &lt;toolbarTask&gt;true&lt;/toolbarTask&gt;   &lt;menubarTask&gt;true&lt;/menubarTask&gt;   &lt;loadAtStartup&gt;true&lt;/loadAtStartup&gt; &lt;/explorerTask&gt; &lt;code&gt;</pre> <p>ForecastMixer uses display config file where we specify the input and output time series filters, and the weighting method. The filters are used to filter the relevant input and output time series from the plots. ForecastMixer uses (forecast) time series of one particular location to create the weights. Then it creates mixed forecast for all locations from the configured location set, using the configured weighting method.</p> <p>This locationSet should be configured in a plot. The location used to create the weights should be configured &lt;locationId&gt; in the display</p> <p>Output time series should have the time series</p>			

Delft-FEWS 2017.01 New Features								
Component/s	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Gui - Grid Display	BoM (Aus)	<a href="#">FEWS-16322</a>	FEWS-16315 HyFS-3071: Have the ability to toggle the time slider from sliding by the accumulation or by the min timestep	Toggle between accumulation/average and moving accumulation/average in Grid display	In the grid display it is possible to configure a slider which allows to aggregate the data on-the-fly. It is possible to configure a moving average, accumulation or a moving accumulation. After configuring one of these options it is now possible to switch between accumulation and moving accumulation and average and moving average in the gui by selecting a dropdown box.			
Plugin - Gui - Grid Display	Waterboard Veluwe & Veluwe	<a href="#">FEWS-14439</a>	WS Veluwe en Veluwe: Spatial Display should support nonequidistant scalar values (Show last non-equi value before or at slider time)	Option added to Grid Display to extend the last value of a non-equidistant timeseries				
Plugin - Gui - Grid Display	BoM (Aus)	<a href="#">FEWS-16386</a>	FEWS-16315 HyFS-3069: Ability to show in spatial display last value for WL related displays	Last value checkbox now also available for equidistant.	Last value checkbox now also available for equidistant. It will show the last non missing value <u>within the search period</u> .			
Plugin - Gui - Grid Display	Pudong (China)	<a href="#">FEWS-16021</a>	Allow projection file (.prj) for regular grids in grids.xml and ascii grids layers	Extended regular grid definition to assign a *.prj file (from mapLayers) to derive the grid definition	Grid definition (in xml) has been extended for regular grids. It is now possible to assign a *.prj file (from mapLayers) to derive the grid definition	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/_06+Grids">https://publicwiki.deltares.nl/display/FEWSDOC/_06+Grids</a>	<code>[code:xml] &lt;regular locationId="MRMS"&gt; &lt;description&gt;MRMS grid&lt;/description&gt; &lt;rows&gt;377&lt;/rows&gt; &lt;columns&gt;850&lt;/columns&gt; &lt;projectionFile&gt;Cumberland_Basins.prj&lt;/projectionFile&gt; &lt;onFile&gt; &lt;firstCellCenter&gt; &lt;x&gt;89.5&lt;/x&gt; &lt;y&gt;37.665&lt;/y&gt; &lt;z&gt;0.0&lt;/z&gt; &lt;/firstCellCenter&gt; &lt;cellSize&gt;0.01&lt;/cellSize&gt; &lt;cellSize&gt;0.01&lt;/cellSize&gt; &lt;/regular&gt;</code>	
Plugin - Gui - Grid Display	RWS (NL)	<a href="#">FEWS-16514</a>	Enable the use of flow-convention for calculating direction in degrees in grid-display	Time series dialog. More control over on the fly conversion from u and v to direction	When double clicking on a grid cell in the spatial display the wind or flow direction is calculated on the fly by the time series dialog. The method that is used can now be configured		<code>[code:xml] &lt;dataLayer&gt; &lt;arrowColor&gt;black&lt;/arrowColor&gt; &lt;arrowSymbol&gt;flow&lt;/arrowSymbol&gt; &lt;arrowDirection&gt;from&lt;/arrowDirection&gt; &lt;timeSeriesSet&gt; &lt;moduleInstanceId&gt;Waqua_Umond_forecast_import&lt;/moduleInstanceId&gt; &lt;valueType&gt;grid&lt;/valueType&gt; &lt;parameterId&gt;V.voorspeld.x&lt;/parameterId&gt; &lt;locationId&gt;Grid_Waqua_Umond&lt;/locationId&gt; &lt;timeSeriesType&gt;simulatedForecasting&lt;/timeSeriesType&gt; &lt;timeStep unit="minute" multiplier="30"/&gt; &lt;relativeViewPeriod unit="day" start="-1" end="2"/&gt; &lt;readWriteMode&gt;read only&lt;/readWriteMode&gt; &lt;/timeSeriesSet&gt; &lt;timeSeriesSet&gt; &lt;moduleInstanceId&gt;Waqua_Umond_forecast_import&lt;/moduleInstanceId&gt; &lt;valueType&gt;grid&lt;/valueType&gt; &lt;parameterId&gt;V.voorspeld.y&lt;/parameterId&gt; &lt;locationId&gt;Grid_Waqua_Umond&lt;/locationId&gt; &lt;timeSeriesType&gt;simulatedForecasting&lt;/timeSeriesType&gt; &lt;timeStep unit="minute" multiplier="30"/&gt; &lt;relativeViewPeriod unit="day" start="-1" end="2"/&gt; &lt;readWriteMode&gt;read only&lt;/readWriteMode&gt;</code>	
Plugin - Gui - Grid Display	FOEN	<a href="#">FEWS-16468</a>	FEWS-16464 FOEN: For each parameter you want to select between several classifications	Instantly switch between class break (legend) definitions in spatial display	Sometimes the default legend is not optimal for the dynamic range of values displayed in the spatial display. For example when you use the aggregation slider or in extreme flood situations. Besides re-scaling the default class breaks the user can now switch between different class breaks when configured			

Delft-FEWS 2017.01 New Features								
Component/s	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Gui - Grid Display	BoM (Aus)	<a href="#">FEWS-16317</a>	FEWS-16315 HyFS-2043: Closed sensors showing on the spatial display and tool tips	Spatial display. Point locations that are no longer or not yet in use for the actual time step time are now invisible.				
Plugin - Gui - Grid Display	FOEN (CH)	<a href="#">FEWS-16466</a>	FEWS-16464 FOEN: Display of comments for Grids	Show imported grid comment in spatial display	When a grid import set comments for grids these can now be displayed in the spatial display		{code:xml} <default> <plotGroupId>Grids</plotGroupId> <commentPositioning>topLeft</commentPositioning> </default> {code}	
Plugin - Gui - Grid Display	Deltares	<a href="#">FEWS-15743</a>	Extend Export functionality shape-file	Shape-file export extended with 'shape id'	Shape-file export extended with 'shape id' which can be configured by the user. By default the location-id is exported.		{code:xml} <xml version="1.0" encoding="UTF-8"?> <gridDisplay xmlns="http://www.wldelft.nl/fews" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/gridDisplay.xsd"> <title>Animations</title> <exportShapeIdFunction>@MATROOS_ID@</exportShapeIdFunction> <default>	
Plugin - GUI - IFD - Forecasts	FEWS Sava	<a href="#">FEWS-16957</a>	IFD permission on run (separate for local and server) button	permissions to run local runs of server runs	It is now possible to configure if a user is allowed to run a workflow locally or at the server. Both are implemented as different permissions.		{code:xml} <node id="workflow" name="workflow"> <workflowId>Workflow</workflowId> <runWorkflowLocallyPermission>runLocalPermissions</runWorkflowLocallyPermission> <runWorkflowAtServerPermission>runAtServerPermissions</runWorkflowAtServerPermission> <localRun>false</localRun> <showRunApprovedForecastButton>true</showRunApprovedForecastButton> </node> {code}	
Plugin - Gui - Map	BoM (Aus)	<a href="#">FEWS-16702</a>	FEWS-16315 WMS background layers must be updated every 15 minutes in cache files	Expiry time for WMS map layer tile cache	You can now configure re-download interval for a WMS layer.		{code:xml} <wmsLayer id="Australia polygon - WMS"> <connectionId>WMS_BOM</connectionId> <wmsLayerName>IDZ10005_poly</wmsLayerName> <imageFormat>png</imageFormat> <transparent>true</transparent> <visible>false</visible> <cacheExpiryTimeSpanMilli unit="minute" multiplier="10"/> </wmsLayer>	
Plugin - Gui - Map	Deltares	<a href="#">FEWS-16878</a>	Add EPSG geodatums supported by geo tools	All official coordinate systems used world wide are now available	FEWS now supports over 6000 coordinate systems used world wide. see <a href="https://epsg.io">https://epsg.io</a>		{code:xml} <map> <geoDatum>EPSG:27700</geoDatum> <projection>mercator</projection> <zScale>	
Plugin - GUI - Sample Viewer	WAM Noorderzijlvest	<a href="#">FEWS-16949</a>	Functionality of permissions in the Sample Viewer	Sample viewer, hide some sample data for certain users.	You can now hide sample values attached to a certain module instance with a permission. A sample contains multiple module instances when processed values are added later.		{code:xml} <xml version="1.0" encoding="UTF-8"?> <sampleDisplay xmlns="http://www.wldelft.nl/fews" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/sampleDisplay.xsd"> <permissions> <moduleInstance id="Import_ECO_CSV" viewPermission="ViewSamples"/> </permissions> <sampleDisplay> </sampleDisplay> {code}  {code:xml} <explorerTask name="Monsterdata [Hydrobiologie]"> <iconFile>sample.png</iconFile> <mnemonic>M</mnemonic> <displayConfigFileName>SamplesDisplay</displayConfigFileName> <toolBarTask>true</toolBarTask> <menuBarTask>true</menuBarTask> <accelerator>ctrl H</accelerator> <loadAtStartup>false</loadAtStartup>	

Delft-FEWS 2017.01 New Features								
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Plugin - Gui - System Monitor	RWS (NL)	<a href="#">FEWS-16143</a>	Add column containing tag to the system monitor "scheduled task" in OC	EventActionTag column added to ScheduledTasks Overview in SystemMonitor of client				
Plugin - Gui - System Monitor	BoM (Aus)	<a href="#">FEWS-16316</a>	FEWS-16315 HYFS-2444: Improvements to Forecasters notes	Forecaster Notes improvements	<p>*1. Deleting forecaster notes*</p> <p>To delete forecaster notes, select the notes in the table and use the toolbar button "Delete" (see picture ForecasterNotes.png). Then the expiry time of the selected forecaster notes will be set to 'now', and the notes will be deleted from database.</p> <p>Also, the expiry time of each forecaster note is visible in the table column "Expiry time"</p> <p>*2. (and 4.) Visibility of forecaster notes in the table*</p> <p>The visibility of the forecaster notes depends on the selected folder or node in the topology tree. If a folder is selected, then the table shows:</p> <ul style="list-style-type: none"> <li>- all notes from the lower (child) folders and nodes, and</li> <li>- notes from the higher (parent) folders.</li> </ul> <p>If any node in the folder is selected, then the table shows:</p> <ul style="list-style-type: none"> <li>- all notes inside that folder, and</li> <li>- notes from the higher (parent) folders.</li> </ul> <p>When nothing is selected in topology tree, then all forecaster notes are shown.</p> <p>When you have already made a selection in topology tree, but you want to see all the notes, press then F12 in the ForecasterNotes and select</p>			
Plugin - Gui - Time Series	Deltares-USA	<a href="#">FEWS-15904</a>	FEWS-10616 show Interval Statistics Display in displayUnits	Interval Statistics Display now shows values in the configured DisplayUnits	Interval Statistics Display now shows values in the configured DisplayUnits	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/28+Interval+Statistics+Dialog">https://publicwiki.deltares.nl/display/FEWSDOC/28+Interval+Statistics+Dialog</a>		
Plugin - Gui - Time Series	FOEN	<a href="#">FEWS-14817</a>	FEWS-9563 Display of Accumulated Precipitation in FEWS graphs	Line style of cumulative function will listen to configured line style		<a href="https://publicwiki.deltares.nl/display/FEWSDOC/Statistical+functions">https://publicwiki.deltares.nl/display/FEWSDOC/Statistical+functions</a>	<pre>[code] &lt;statisticalFunction function="cumulative"&gt; &lt;lineStyle&gt;dashdot;thick&lt;/lineStyle&gt; &lt;/statisticalFunction&gt; [code]</pre>	
Plugin - Gui - Time Series, Plugin - Module - Data Export	Noorderzijlvest (strippenkaart)	<a href="#">FEWS-16837</a>	Interactive export. Add permissions for exporting doubtful and unreliable values	Permissions to prevent users exporting unreliable data	Extra permissions are added to the explorer.xml to prevent (some) users are exporting unreliable data		<pre>[code] explorer.xml [code:xml] &lt;interactiveExportFormats&gt; &lt;exportUnreliablePermission&gt;EXPORT_UNRELIABLE&lt;/exportUnreliablePermission&gt; &lt;exportDoubtfulPermission&gt;EXPORT_DOUTBFUL&lt;/exportDoubtfulPermission&gt; &lt;interactiveExportFormat&gt; &lt;name&gt;ExportHydrobiologischDatamodel.csv&lt;/name&gt;</pre>	
Plugin - Gui - Time Series	BoM (Aus)	<a href="#">FEWS-16319</a>	FEWS-16315 HyFS-2565: Add flood class levels values to thresholds	Time series dialog. Threshold value visible in threshold line label.	You can now include the value in the label of the threshold line with a configuration option		<pre>[code:xml] &lt;thresholdDisplayOptions id="Minor Flooding" visible="true"&gt; &lt;color&gt;chartreuse3&lt;/color&gt; &lt;labelIncludesValue&gt;true&lt;/labelIncludesValue&gt; &lt;labelAlignment&gt;left&lt;/labelAlignment&gt; &lt;/thresholdDisplayOptions&gt; [code]</pre>	
Plugin - Gui - Time Series	TVA	<a href="#">FEWS-15922</a>	FEWS-10616 Timeseries "relativelyAbsoluteViewPeriod"	Redesigned time window popup	The time window popup used in the time series dialog and grid display is now redesigned. You can now stop the time window from moving automatically with the system time. It is now clearly visible which fields are adjusted and now longer updating automatically. Individual fields can now be reset to the default. A shortcut button is added to set the fields to show the current day with a single click.			

Delft-FEWS 2017.01 New Features								
Component/s	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Gui - Time Series	BoM (Aus)	<a href="#">FEWS-16502</a>	FEWS-16033 Update Time Series Display with boxes			<a href="https://publicwiki.deltares.nl/display/FEWSDOC/2.0+Verification+Analysis+Display">https://publicwiki.deltares.nl/display/FEWSDOC/2.0+Verification+Analysis+Display</a>		
Plugin - Gui - Time Series	Water Board Noorderzijlvest	<a href="#">FEWS-16922</a>	Custom validation flags need some improvements	Validation flag improvements	Validation flags names have been improved. Added support for marking with flags: Inside detection limit Above detection limit Below detection limit Varying detection limit			
Plugin - Gui - Time Series Modifier	BoM (Aus)	<a href="#">FEWS-16325</a>	FEWS-16315 HyFS-2123: In modifiers display need to clearly show some of the drop down boxes are available.	Show a combo box for location attributes in the modifiers panel	It is possible to configure that for a certain attribute a fixed number of options are available when modifying this attribute in the modifiers panel.  In the previous releases the location attribute editor panel showed a regular edit box only after clicking on the box a combo box was shown. It is was therefore not always clear to the user that a fixed set of options were available. In the current release the panel will always show a combo box.			
Plugin - Gui - Time Series Modifier	BoM (Aus)	<a href="#">FEWS-16385</a>	FEWS-16315 HyFS 2063: Reservoir - Option to enter dam release in ML/d	The ability to switch between m3/s and ML/d is available on the modifier display.	To change (and save) this in the modifier display, the procedure is as follows: <ul style="list-style-type: none"><li>* Open time series display and change unit from m3/s to ML/d</li><li>* The Modifier display will still use the m3/s units.</li><li>* Close the Modifier display and open it again. The modifier display will now load the display settings and use the same units as specified in the time series display.</li><li>* There will be no button in the Modifier display, only in the time series display When the FEWS system closes the units are saved in the usersettings ini file.</li></ul> Next time FEWS is opened the correct units will be used, this can be the m3/s or the ML/d, depends what was selected when closing FEWS.			
Plugin - Module - (Primary) Validation	Deltares	<a href="#">FEWS-16485</a>	Logging must be made more consistent	Use parameter and station name with ID between () in limit violation more consistently	Use parameter and station name with ID between () in limit violation more consistently			
Plugin - Module - (Primary) Validation, Plugin - Module - Thresholds	Water Board Noorderzijlvest	<a href="#">FEWS-12961</a>	FEWS-12539 Defining thresholds and validation rules for samples without needing to do that for all individual 10.000 qualifiers	Ignore qualifiers when resolving thresholds for time series	You can now ignore the qualifiers in the threshold value sets. This reduces the number of threshold sets dramatically when the threshold values do not depend on the time series qualifier		<pre>(code:xml) &lt;thresholdValueSet id="TVS1"&gt; &lt;considerQualifiers&gt;false&lt;/considerQualifiers&gt; &lt;levelThresholdValue&gt; &lt;levelThresholdId&gt;level1&lt;/levelThresholdId&gt; &lt;value&gt;1.5&lt;/value&gt; &lt;/levelThresholdValue&gt;</pre> <pre>(code)</pre>	
Plugin - Module - Archive	BoM (Aus)	<a href="#">FEWS-16320</a>	FEWS-16315 HyFS-2579: Ability to have some idmapping on Archive Import to deal with changed locationID's	id mapping for data imports from the archive	The timeseriesset definition is stored in the netcdf file when the data is send to the archive. By default the timeseries are mapped to this definition. It is now possible to create an id mapping for locations and the parameters when importing data from the archive. This id mapping will map a location id or a parameter id which is defined in the timeseriesset definition in the netcdf file to the configured location id or parameter id in the configured id mapping.			

Delft-FEWS 2017.01 New Features								
Component/A	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Archive	TVA	<a href="#">FEWS-16616</a>	Seamless integration for external forecasts	Seamless integration for external forecasts in the pi webservice	It is now also possible to retrieve external forecasts from the archive by using the pi webservice. This is now possible because the seamless integration between the pi webservice and the Deltires Open Archive is now also available.			
Plugin - Module - Archive	RWS (NL)	<a href="#">FEWS-16094</a>	RWS: Create tool to generate metadata.xml for matroos	Created a tool that generates Deltires-Archive metadata.xml files from the MATROOS netcdf archive	Created the class nl.wldelft.archive.tools.matroos.MatroosMetaDataAdapterGenerator in the Delft_Archive_Util.jar. This class can be run using the arguments archivedir= path or name of archive data directory. Required parameter statistics=true/false. Optional parameter (default = false), if true max and min values are collected for the variables in the netcdf files. overwrite=true/false. Optional parameter (default = false). Option to overwrite existing metadata files. subDirPattern=regular expression defining an overruling pattern for the folder structure in which metadata.xml files are produced, default is {code}":+{1\}{d[4]}{1\}{V}.+{1\}{l}{6} {code} which validates for folder '<root>/yyyy/sourceid/yyyyMM/'			
Plugin - Module - Archive	BoM (Aus)	<a href="#">FEWS-16501</a>	FEWS-16033 Export properties to Open archive	Export properties to Open archive	Time series properties are written to the archive and read into FEWS by default. Exporting the properties can be disable with the option: <includeTimeSeriesProperties>true</includeTimeSeriesProperties> timeRanges and valueRanges are stored as ancillary netcdf variables: value_min, value_max, time_start and time_end. Exporting these variables is set by default. This can be disabled with the properties: <includeTimeRanges>true</includeTimeRanges> <includeValueRanges>true</includeValueRanges>	<a href="https://publicwiki.deltires.nl/display/FEWSDOC/25+Using+the+Deltires+Open+Archive">https://publicwiki.deltires.nl/display/FEWSDOC/25+Using+the+Deltires+Open+Archive</a>	(code) <xml version="1.0" encoding="UTF-8"?> <exportArchiveModule xmlns="http://www.wldelft.nl/fews" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/exportArchiveModule.xsd"> <!--Archive activities on Basin level. Export of observed data, forecaster notes and content reviewer forecasts--> <!--The property BASIN is used as Archive Area ID, this is the Archive folder structure and the HyFS Basin ID--> <exportExternalForecast> <general> <archiveFolder>ARCHIVE_FOLDERS/externalforecasts</archiveFolder> <relativePeriod unit="day" start="-500" end="50"/> <idMapId>idArchive</idMapId> </general> <activities> <netcdfExportActivities> <netcdfExportActivity> <fileName>WaterLevel_Issued_Forecast_Water_Level.nc</fileName> <areaId>aifsml</areaId>	
Plugin - Module - Archive	ZZL	<a href="#">FEWS-16140</a>	FEWS-14055 Re-ID Tool : Deltires Open Archive	Re-ID Tool works with Open Archive		<a href="https://publicwiki.deltires.nl/display/FEWSDOC/14+Tips+and+Tricks#id-14TipsandTricks-Re-IdTool">https://publicwiki.deltires.nl/display/FEWSDOC/14+Tips+and+Tricks#id-14TipsandTricks-Re-IdTool</a>		

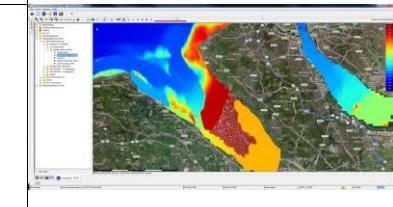
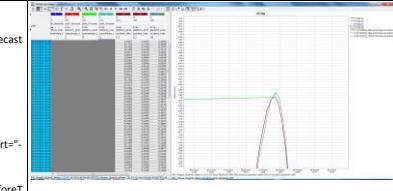
Delft-FEWS 2017.01 New Features								
Component/A	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Data Export	RWS (NL)	<a href="#">FEWS-15431</a>	Add threshold information to NetCDF files	Threshold information added to NetCDF files	Possibility to export thresholds to scalar netcdf files with the use of id mapping. This way different thresholds for different locations can be exported to the same id in netcdf. This is primarily meant for reading by external tools.	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/NETCDF-CP-TIMESERIES">https://publicwiki.deltares.nl/display/FEWSDOC/NETCDF-CP-TIMESERIES</a>	Export thresholds by adding includeThresholds to the properties  {code:xml} <general> <exportType>NETCDF- CF_TIMESERIES</exportType> <folder>./unit_test_output/nl/wldelft/fews/sys tem/plugin/dataExport/TimeSeriesExportTest/ex portNetcdfThresholdsEmpty/export</folder> <exportFileName> <name>netcdf_timeseries.nc</name> </exportFileName> <idMapId>Netcdf</idMapId> <exportMissingValueString> 9999.0</exportMissingValueString> <exportThresholds>true</exportThresholds> </general> <timeSeriesSet> <moduleInstanceId>ExportRunMultipleTimeSeri es</moduleInstanceId> <valueType>scalar</valueType> <parameterId>H.m</parameterId> <locationId>H.2029</locationId> <timeSeriesType>external historical</timeSeriesType> <timestep unit="minute" divider="1" multiplier="15"/> <relativeViewPeriod unit="minute" start="0" end="30"/>	
Plugin - Module - Data Export	FOEN	<a href="#">FEWS-16467</a>	FEWS-16464 FOEN CR 2017.01: Export T0 of the meteo forecast used	Exporting external forecast times of the hydrological and meteorological forecasts that has been used to create simulated forecast	To export the forecast times , i.e. init times of the hydrological and meteorological models, taken the following steps: - when making a Fews Forecast, create a dummy non equidistant series . These series have just one timestamp that is equal to the external forecast time of the hydrological c.q. meteorological model. - Configure dummy series parameters in properties, for example {code:xml} <string key="HydrologicalForecastParameter" value="Q.f"/> <string key="MeteorologicalForecastParameter" value="P.f"/> </properties> <code> - Run GIN export. The series associated with the parameters from the properties are used to obtain initime and initime2 (these series are not exported)  Exporting external forecast times of the hydrological and meteorological forecasts in Reports: For this purpose the report function LASTVALUETIME can be used. This function inserts the date and time of the most recent value present in given time series array. An example: LASTVALUETIME(Qf; dateFormat1)			
Plugin - Module - Data Export	RWS (NL)	<a href="#">FEWS-15723</a>	New data export for LHP app (RwsOS)	New data export for LHP app		<a href="https://publicwiki.deltares.nl/display/FEWSDOC/LHP">https://publicwiki.deltares.nl/display/FEWSDOC/LHP</a>		
Plugin - Module - Data Export	Deltares	<a href="#">FEWS-16761</a>	XmlChunkedSerializer. Allow writing pi time series in chunks	Large Pi XML files now written in chunks				
Plugin - Module - Data Import	Deltares	<a href="#">FEWS-14004</a>	actionLogEventTypeld in combinatie met DDA werkt niet altijd, redesign nodig	The log event handling for log messages belonging to a system activity other than a taskrun was broken but is now fixed.	For DDA tasks it was made that event triggering only took place after a taskrun was completed. This broke the triggering for event codes generated by MC components (FSLListener, etc).			

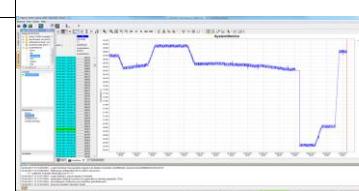
Delft-FEWS 2017.01 New Features								
Component/A	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Data Import	Quebec (Ca)	<a href="#">FEWS-16664</a>	FEWS-16663 Québec: multiple flag columns in generalCSV import	In the generalCsv import it is possible to import multiple flag columns	In the generalCsv import it is possible to import multiple flag columns. This works only in combination with multiple value columns. For each flag column a parameter id and/or location id can be specified, this should be done in the same way as the value column so the flag will match the correct value.	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/General+Csv#General,Csv-Importingmultipleflagcolumns(since2016.02)">https://publicwiki.deltares.nl/display/FEWSDOC/General+Csv#General,Csv-Importingmultipleflagcolumns(since2016.02)</a>	<code>&lt;code&gt;&lt;xmlelement&gt;&lt;general&gt;&lt;importType&gt;generalCSV&lt;/importType&gt;&lt;folder&gt;import/generalCsv/MultipleFlagColumns&lt;parameterId&gt;&lt;/parameterId&gt;&lt;table&gt;&lt;locationColumn name="NoClimato"/&gt;&lt;dateTimeColumn name="Date_Hheure" pattern="yyyy-MM-dd HH:mm:ss"/&gt;&lt;valueColumn name="TempMin_degC" parameterId="T.m" unit="DEGC"/&gt;&lt;flagColumn name="Code_TMin" parameterId="T.m"/&gt;&lt;valueColumn name="TempMax_degC" parameterId="T.smelt" unit="DEGC"/&gt;&lt;flagColumn name="Code_TMax" parameterId="T.smelt"/&gt;&lt;/table&gt;&lt;flagConversionId&gt;FlagConversionsMultipleFlagColumns&lt;/flagConversionId&gt;&lt;missingValue&gt;-999&lt;/missingValue&gt;&lt;/code&gt;</code>	
Plugin - Module - Data Import	FEWS Sava	<a href="#">FEWS-16220</a>	CroatianHFSResults data import	CroatianHFSResults data import		<a href="https://publicwiki.deltares.nl/display/FEWSDOC/CroatianHFSResults">https://publicwiki.deltares.nl/display/FEWSDOC/CroatianHFSResults</a>	<code>&lt;importType&gt;CroatianHFSResults&lt;/importType&gt;</code>	
Plugin - Module - Data Import	Land OOE (AT)	<a href="#">FEWS-15929</a>	WISKI Import changed format					
Plugin - Module - Data Import	MDDELCC	<a href="#">FEWS-16916</a>	FEWS-16663 Import of bespoke Hydro Québec .prn files	Import type added: HydroQuebecPRN	Import for specific Quebec format, containing flow for 3 Quebec locations	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/HydroQuebecPRN">https://publicwiki.deltares.nl/display/FEWSDOC/HydroQuebecPRN</a>	<code>&lt;importType&gt;HydroQuebecPRN&lt;/importType&gt;</code>	
Plugin - Module - Data Import	EU	<a href="#">FEWS-15946</a>	Add parameter to Landsat-HDF5	DSSF parameter added to Landsat-HDF5 import	DSSF parameter added to import Landsat-HDF5 to be able to read parameters from LSA SAF data	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/Landsat-HDF5">https://publicwiki.deltares.nl/display/FEWSDOC/Landsat-HDF5</a>		
Plugin - Module - Data Import	Hydrotec (D)	<a href="#">FEWS-16393</a>	FEWS-11612 Hydrotec: Definition of time zone in zrpx import	Wiski zrpx import & reading time zones	Wiski zrpx import supports all possible time zone definitions specified in the T2 field.  The possible time zone definitions are described in the ZRXP documentation.			
Plugin - Module - Data Import	RWS (NL)	<a href="#">FEWS-16028</a>	Netcdf longitudinal profile import should accept files where "n�名字" variable is called differently	Netcdf longitudinal profile import now uses the cf_role attribute to find the n�名字 variable in the netcdf file.	Netcdf longitudinal profile import now uses the cf_role attribute to find the n�名字 variable in the netcdf file. If not found, then it uses the variable called "n�名字" for backwards compatibility.	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/NETCDF-CF_PROFILE">https://publicwiki.deltares.nl/display/FEWSDOC/NETCDF-CF_PROFILE</a>		
Plugin - Module - Data Import	Alberta (Ca)	<a href="#">FEWS-16580</a>	WiskiService. Use windows charset when encoding not specified in xml	WiskiServer parser adjusted to read default OS charset	WiskiServer parser adjusted to read default OS charset if charset is not available in XML file			
Plugin - Module - Data Import	FOEN	<a href="#">FEWS-16465</a>	FEWS-16464 FOEN: Import of ArcInfo ASCII grids with additional log file	Added new importType "OSHDAsciiGrid"	Added new importType "OSHDAsciiGrid" for importing Operational Snow-Hydrological service (OSHD) ascii grid files with additional metadata files.	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/OSHDAsciiGrid">https://publicwiki.deltares.nl/display/FEWSDOC/OSHDAsciiGrid</a>	<code>&lt;code&gt;&lt;xmlelement&gt;&lt;xml version="1.0" encoding="UTF-8"?&gt;&lt;timeSeriesImportRun xmlns="http://www.wldelft.nl/fews" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wldelft.nl/fews http://www.wldelft.nl/schemas/version1.0/timeSeriesImportRun.xsd"&gt;&lt;import&gt;&lt;general&gt;&lt;importType&gt;OSHDAsciiGrid&lt;/importType&gt;&lt;folder&gt;\$IMPORT_FOLDER\$/SWE&lt;/folder&gt;&lt;idMapId&gt;IdImportSWEAsc&lt;/idMapId&gt;&lt;geoDatum&gt;CH1903&lt;/geoDatum&gt;&lt;/general&gt;&lt;timeSeriesSet&gt;&lt;moduleInstanceId&gt;ImportSWE&lt;/moduleInstanceId&gt;&lt;valueType&gt;grid&lt;/valueType&gt;&lt;parameterId&gt;SWE.fri&lt;/parameterId&gt;&lt;locationId&gt;Swissix&lt;/locationId&gt;&lt;timeSeriesType&gt;externalForecasting&lt;/timeSeriesType&gt;&lt;timeStep unit="hour" multiplier="1"/&gt;&lt;readWriteMode&gt;addOriginals&lt;/readWriteMode&gt;&lt;/timeSeriesSet&gt;&lt;/code&gt;</code>	
Plugin - Module - Data Import	fews sava	<a href="#">FEWS-16694</a>	New importer for CSV files with 1 row of headers with location names.	New import format for CSV files that only contain one header line with location ids		<a href="https://publicwiki.deltares.nl/display/FEWSDOC/LocationidsHeaderCsv">https://publicwiki.deltares.nl/display/FEWSDOC/LocationidsHeaderCsv</a>		

Delft-FEWS 2017.01 New Features								
Component/A	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Data Import	Deltas	<a href="#">FEWS-17014</a>	FEWS-Accelerator: Import GMP-iMerge satellite data	Import GMP-iMerge satellite data added	Extended the NetCDF gridded dataset import so it can read the GMP-iMerge satellite data	<a href="https://publicwiki.deltas.nl/display/FEWSDOC/NetcdfGridDataset">https://publicwiki.deltas.nl/display/FEWSDOC/NetcdfGridDataset</a>	<pre>&lt;code&gt;&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;timeSeriesImportRun     xmlns="http://www.wldelft.nl/fews"     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"     xsi:schemaLocation="http://www.wldelft.nl/fews         http://fews.wldelft.nl/schemas/version1.0/timeSeriesImportRun.xsd"&gt;     &lt;import&gt;         &lt;general&gt;             &lt;importType&gt;NetcdfGridDataset&lt;/importType&gt;             &lt;folder&gt;\$IMPORT_FOLDERS/imerg&lt;/folder&gt;             &lt;fileNameDateTimeFilter subFolderLevel="0"&gt;                 &lt;!-201412--&gt;                 &lt;timeStep unit="month"/&gt;                 &lt;dateTimePattern&gt;yyyyMM&lt;/dateTimePattern&gt;                 &lt;prefixLength&gt;0&lt;/prefixLength&gt;                 &lt;postFixLength&gt;0&lt;/postFixLength&gt;             &lt;/fileNameDateTimeFilter&gt;             &lt;fileNameDateTimeFilter subFolderLevel="1"&gt;                 &lt;!-3B-HHR-E-MS.MRG.3IMERG.2014231- S173000-E175959.1050.V04A.RT.H5--&gt;                 &lt;timeStep unit="minute" multiplier="30"/&gt;                 &lt;dateTimePattern&gt;yyyyMMdd- S1Hmms&lt;/dateTimePattern&gt;                 &lt;prefixLength&gt;23&lt;/prefixLength&gt;                 &lt;postFixLength&gt;24&lt;/postFixLength&gt;             &lt;/fileNameDateTimeFilter&gt;</pre>	
Plugin - Module - Data Import	Deltas	<a href="#">FEWS-16206</a>	BUFR files shouldn't be copied to the bin directory	BUFR tables should be available in the Modules/bufr directory	The BUFR import requires bufr tables (csv files) that used to be in the FEWS bin directory. Since 2017.01 the BUFR tables are expected in the Modules/bufr directory.  For more information see: <a href="https://publicwiki.deltas.nl/display/FEWSDOC/">https://publicwiki.deltas.nl/display/FEWSDOC/</a>			
Plugin - Module - Data Import	ARPA / Po (IT)	<a href="#">FEWS-16333</a>	BUFR import 64 bits support	BUFR import is supported on x64 bit Windows	BUFR import is supported on x64 bit Windows			
Plugin - Module - Data Import	Deltas	<a href="#">FEWS-16405</a>	KiwiPreAdapter works incorrect on Linux	KiwiPreAdapter has become obsolete	The KiwiPreAdapter has become obsolete and has been removed from the FEWS codebase.			
Plugin - Module - Data Import	Bangladesh	<a href="#">FEWS-15623</a>	AKVO Flow Import	AKVO Flow Import added	Akvo Flow FEWS importer. For documentation see:  <a href="https://publicwiki.deltas.nl/display/FEWSDOC/Akvo">https://publicwiki.deltas.nl/display/FEWSDOC/Akvo</a>	<a href="https://publicwiki.deltas.nl/display/FEWSDOC/Akvo">https://publicwiki.deltas.nl/display/FEWSDOC/Akvo</a>	<pre>&lt;code&gt;&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;timeSeriesImportRun     xmlns="http://www.wldelft.nl/fews"     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"     xsi:schemaLocation="http://www.wldelft.nl/fews         http://fews.wldelft.nl/schemas/version1.0/timeSeriesImportRun.xsd"&gt;     &lt;import&gt;         &lt;general&gt;             &lt;importType&gt;Akvo&lt;/importType&gt;             &lt;serverUrl&gt;https://akvoflow-141.appspot.com/api/v1&lt;/serverUrl&gt;             &lt;user&gt;sNeNzrMdzgjH3KLyrQEG+o3t3tPGu7BpTDDkmPJ3W4=&lt;/user&gt; &lt;!-- akvo access key --&gt;             &lt;password&gt;c2zU8wWQ2nFHm17UW96nZea+A Ah4o4pD0ljDlwM78=&lt;/password&gt; &lt;!-- akvo secret --&gt;             &lt;relativeViewPeriod unit="day" start="-20" end="0" startOverrulable="true" endOverrulable="false"/&gt; &lt;!-- read all survey instances of the last 20 days --&gt;             &lt;idMapId&gt;dAkvo&lt;/idMapId&gt;         &lt;/general&gt;         &lt;properties&gt;             &lt;string value="1100001" key="siteRegistrationSurveyId"&gt;&lt;/string&gt;</pre>	
Plugin - Module - Error Correction	Sener / EJIE	<a href="#">FEWS-16508</a>	Displaying the ARMA Error correction coefficients in FEWS and normal logging	Change logmessages from DEBUG to INFO	Changed log level for certain log messages from DEBUG to INFO			

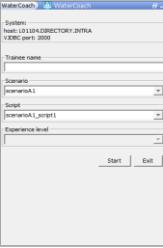
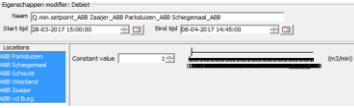
Delft-FEWS 2017.01 New Features									
Component/A	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images	
Plugin - Module - Error Correction	Sava	<a href="#">FEWS-16305</a>	ARMA does not support use of locationSets	ARMA ErrorModel: Added config option "loopOverMultipleTimeSeries" to errorModel.	ARMA ErrorModel: Added config option "loopOverMultipleTimeSeries" to errorModel. This makes it possible to configure locationSets in the input and output variables of an errorModel. The errorModel will then loop over the locations in the locationSet and run for each location separately.	<a href="https://publicwiki.deltares.nl/pages/viewpage.ac?ion=pageId=6083839#id_06ErrorCorrectionModule(ARMA)-loopOverMultipleTimeSeries">https://publicwiki.deltares.nl/pages/viewpage.ac?ion=pageId=6083839#id_06ErrorCorrectionModule(ARMA)-loopOverMultipleTimeSeries</a>	<pre>(code:xml) &lt;errorModelSet&gt; ... &lt;loopOverMultipleTimeSeries&gt;true&lt;/loopOverMultipleTimeSeries&gt; ... &lt;/errorModelSet&gt; (code)</pre>		
Plugin - Module - General Adapter	Deltares	<a href="#">FEWS-14983</a>	FEWS-14498 General Adapter allow forking java proces	Option added to run java activity from general adapter with different jre	Option added to run java activity from general adapter with different jre, for example 32 bit if an adapter is not compatible with 64 bit	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/05+General+Adapter+Module#05GeneralAdapterModule-command">https://publicwiki.deltares.nl/display/FEWSDOC/05+General+Adapter+Module#05GeneralAdapterModule-command</a>	<pre>(code:xml) &lt;command&gt; &lt;className&gt;nl.wldelft.fews.adapter.pcoverslag.PcOverslagAdapter&lt;/className&gt; &lt;binDir&gt;bin&lt;/binDir&gt; &lt;customJreDir&gt;%REGION_HOME%\\jre1.8.0_101&lt;/customJreDir&gt; &lt;/command&gt;</pre>		
Plugin - Module - General Adapter	Deltares	<a href="#">FEWS-16372</a>	WHAT_IF_ID variable in general adapter	Additional variable %WHAT_IF_ID% in general adapter	Additional variable %WHAT_IF_ID% in general adapter	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/05+General+Adapter+Module">https://publicwiki.deltares.nl/display/FEWSDOC/05+General+Adapter+Module</a>	<pre>(code:xml) &lt;workDir&gt;%WHAT_IF_ID%&lt;/workDir&gt; (code)</pre>		
Plugin - Module - Modifiers (TimeSeries)		<a href="#">FEWS-17087</a>	FEWS-16910 Grib2 imports: add property to Time Series Import to get parameter name from attributes of the variable	TimeSeriesImport property "Use_Grib2_Parameter_Name"	Property "Use_Grib2_Parameter_Name" is applicable to Grib2 files only. When configured, then Grib2 import reads the parameter Id's from attribute Grib2_Parameter_Name . This is an attribute of the variables that are imported as parameters. Grib2 import uses by default variable full name as parameter Id. Variable full names are generated by Netcdf library, which is used to read grib2 files. Sometimes, in case of accumulated series, Netcdf generates different variable full names per time stamp, for example "Total_precipitation_surface_17_Hour_Accumulation", "Total_precipitation_surface_23_Hour_Accumulation", "Total_precipitation_surface_39_Hour_Accumulation" and so on. However, all these variables are associated with the same series. In this case use property "Use_Grib2_Parameter_Name" to read parameter Id from the attribute Grib2_Parameter_Name which contains simple(base) parameter name, for example "Total precipitation".		<pre>Example from TimeSeriesImport xml file: (code:xml) &lt;properties&gt; &lt;bool key="Use_Grib2_Parameter_Name" value="true"/&gt; &lt;/properties&gt; (code)</pre>		
Plugin - Module - PcrTransformation	Deltares	<a href="#">FEWS-15915</a>	PCRaster binaries shouldn't be in bin directory of FEWS	PCRaster 4.1 should be installed in the Modules\pcraster	For 64 bit support the PCRaster 4.1 libraries should no longer be installed in the FEWS bin directory but in the Modules\pcraster\lib directory. See:	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/PCRaster">https://publicwiki.deltares.nl/display/FEWSDOC/PCRaster</a>			
Plugin - Module - Reports	Deltares	<a href="#">FEWS-15310</a>	FlagCountstable with LocationSets already possible	FlagCountstable with LocationSets already possible	FlagCountstable with LocationSets already possible		<pre>(code:xml) &lt;flagCountsTable id="FlagCountsTable" formatId="FlagCountsTableFormat"&gt; &lt;inputVariableId&gt;AreaA&lt;/inputVariableId&gt; &lt;/flagCountsTable&gt; (code)</pre>		
Plugin - Module - Reports	RWS (NL)	<a href="#">FEWS-15950</a>	Extension of function \$LOGENTRY in Report Template	Report function LogEntry : usage of LINE_PREFIX keyword	It is possible to insert a specific text at the beginning of each new line in the text returned by the function LogEntry. To insert the text, use keyword LINE_PREFIX and specify the text that should be inserted . If LINE_PREFIX is used, all three preceding arguments should be specified. Use empty string if argument 2 and 3 are not relevant. Some examples: LOGENTRY(Dam.info;;;;LINE_PREFIX=%AC) returns message from logging entry with event code Dam.info and inserts %AC at the beginning of each new line in the message LOGENTRY(Dam.info;userId;;;;LINE_PREFIX=%AC) returns userId from logging entry with event code Dam.info and inserts %AC at the beginning				

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Component/A	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Reports	BSH	<a href="#">FEWS-15835</a>	Export chart with two y-axis, where one axis shows the local datum and the other axis shows the global datum for the same parameter	Datum axis in Reports and DisplayGroups	<p>Datum axis is an axis on the right side of the chart, and it shows left axis ticks in global datum .</p> <p>*Datum axis configuration in Reports* Use element "datumAxis". Datum axis uses altitude (z) of the first location in the chart to determine global datum. If no "caption" is configured, then datum axis shows left axis title with suffix "global datum" Datum axis is displayed with the same axis settings as configured for the left axis. See configuration examples (xml's and associated pictures) in ReportsDatumAxis.ZIP</p> <p>*Datum axis configuration in DisplayGroups* Configure element "datumAxis" in the subplot. Datum axis uses altitude (z) of the first location shown in the subplot to determine the global datum. Datum axis shows left axis title with global datum suffix, see TSD_localDatumSelected.png . If global datum is elected in TSD toolbar, then datum axis shows ticks in local datum, see TSD_globalDatumSelected.png . (both png's are in TSDDatumAxis.zip)</p>			
Plugin - Module - Reports	RWS (NL)	<a href="#">FEWS-15245</a>	RWOS NZ: Add HW and LW on the top row of WaterWijzer	Reports: hwLwHtmlTable	<p>hwLwHtmlTable is a html table with HW (high water) and LW (low water) indicators in the time series event columns.</p> <p>HW is used when the event value is positive, LW is used when the event value is negative.</p> <p>The filter 'hwLwTimeSeries' specifies which time series should be used to determine HW or LW . The filter should refer to exactly one time series and this time series should be one of the series used in hwLwHtmlTable .</p> <p>To format hwLwHtmlTable , use a htmlTableFormat with event times in the columns {column=times/{column=}</p>	<p>Example from Reports.xml :</p> <pre>&lt;code&gt;&lt;ml&gt; &lt;hwLwHtmlTable id="table1"&gt;   &lt;format&gt;htmlTableFormat1&lt;/format&gt;   &lt;timeSeries&gt;Hrated&lt;/timeSeries&gt;   &lt;timeSeries&gt;Hcorr&lt;/timeSeries&gt;   &lt;timeSeries&gt;Hm&lt;/timeSeries&gt;    &lt;hwLwTimeSeries&gt;     &lt;parameterId&gt;H.rated&lt;/parameterId&gt;   &lt;/hwLwTimeSeries&gt; &lt;/hwLwHtmlTable&gt; &lt;/code&gt;</pre> <p>The complete example can be found in attached</p>		
Plugin - Module - Reports	TVA	<a href="#">FEWS-16496</a>	FEWS-10616 TVA: ability to configure major and minor gridlines in Report charts	Chart Reports - new configuration element 'tick' for the time axis	<p>Use 'tick' to define the places you want a date/time label and/or tick mark and/or grid line. 'tick' has obligatory elements timeStep, tickMarkVisible, gridLineStyle, labelVisible, and optional elements format and font.</p> <p>With timeStep you define the places of the ticks. For example if the timeStep is 6 hours, then the ticks will be aligned with the synoptic times 00, 06, 12, 18</p> <p>Using tickMarkVisible , labelVisible and gridLineStyle you define how the 'tick' should be displayed: as a grid line and tick mark, or as tick mark only, with or without label and so on.</p> <p>If you configure multiple 'tick' elements, configure then the largest time step first, and then the smaller time steps.</p> <p>See configuration examples.examples.zip.</p>	<pre>&lt;code&gt;&lt;ml&gt; &lt;chartFormat id="ChartFormat1"&gt;   &lt;bottomAxis&gt;      &lt;tick&gt;       &lt;timeStep&gt;00:00&lt;/timeStep&gt;       &lt;tickMarkVisible&gt;false&lt;/tickMarkVisible&gt;       &lt;gridLineStyle&gt;solid&lt;/gridLineStyle&gt;       &lt;labelVisible&gt;true&lt;/labelVisible&gt;       &lt;format&gt;yyyy-dd-MM\HH:mm&lt;/format&gt;       &lt;font size="11" style="bold"/&gt;     &lt;/tick&gt;      &lt;tick&gt;       &lt;timeStep unit="hour" multiplier="6"/&gt;       &lt;tickMarkVisible&gt;true&lt;/tickMarkVisible&gt;       &lt;gridLineStyle&gt;dotted&lt;/gridLineStyle&gt;       &lt;labelVisible&gt;true&lt;/labelVisible&gt;       &lt;format&gt;HH:mm&lt;/format&gt;     &lt;/tick&gt;      &lt;tick&gt;       &lt;timeStep unit="hour"/&gt;       &lt;tickMarkVisible&gt;true&lt;/tickMarkVisible&gt;       &lt;gridLineStyle&gt;none&lt;/gridLineStyle&gt;       &lt;labelVisible&gt;false&lt;/labelVisible&gt;     &lt;/tick&gt;   &lt;/bottomAxis&gt; &lt;/chartFormat&gt; &lt;/code&gt;</pre>		

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Component/A	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Reports	TVA	<a href="#">FEWS-16497</a>	FEWS-10616 TVA: extend 'tickTimeStep' configuration option to Reports module	Chart Reports : aligning date/time ticks with the valid times of the (cardinal) time step	To tie the date/time ticks to the valid times of the (cardinal) time step , configure a timeStep using 'tick' configuration element in chartFormat. For example, if the tick timeStep is 6 hours then the ticks are always aligned with the synoptic times 00Z, 06Z, 12Z, 18Z.  Detailed description and more examples are available in FEWS-16496		<pre>(code:xml) &lt;chartFormat id="ChartFormat"&gt; &lt;bottomAxis&gt; &lt;tick&gt; &lt;timeStep unit="hour" multiplier="6"/&gt; &lt;tickMarkVisible&gt;false&lt;/tickMarkVisible&gt; &lt;gridLineStyle&gt;dashed&lt;/gridLineStyle&gt; &lt;labelVisible&gt;true&lt;/labelVisible&gt; &lt;format&gt;MM/dd/yyyy HH&lt;/format&gt; &lt;/tick&gt; &lt;/bottomAxis&gt; &lt;/chartFormat&gt;</pre>	
Plugin - Module - Transformation	RWS (NL)	<a href="#">FEWS-16577</a>	Transformation: time shift / sample with timeReferenceInputVariable having different length from the input/output time series	New transformation for time shift and sampling	This transformation has two input time series. The first one contains the reference times and the other one the values. The transformation will for each time step in the reference time series try to find the closest value in the time series with values. That value will be written to the time step from the reference time series in the output time series. Each value from the time series with values will only be written once to the output time series. If for multiple reference times the same time/value pair from the value time series are the closest the value will be written to the closest reference time only and the other reference times will not be written to the output time series.			
Plugin - Module - Transformation	Deltares (research)	<a href="#">FEWS-16135</a>	Transformation to remove constant values(e.g. dry cells) from gridded data		New transformation that replaces grid values with NaN where water level is not higher than the Z value of the grid cell	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/removeDryCells">https://publicwiki.deltares.nl/display/FEWSDOC/removeDryCells</a>		
Plugin - Module - Transformation	RWS (NL)	<a href="#">FEWS-13904</a>	Extend TransformationModule functionality with a loop over the forecasts (implement PeakPerformanceIndicators in TransformationModule)	TransformationModule extended with functionality to loop over the forecasts	When a forecastLoopSearchPeriod is configured the transformation will be repeated for each (external and simulated) forecast found in the defined period. This will only work when the <outputVariable> is an external forecasts, the output variable for each execution will get the same external forecast time.  When more than one input variable is used (as for sample equidistant):  When other input variables are also forecasts, the same amount of forecasts should be present as in the first input variable because these will also be looped over. When other input variables are not forecasts there will only be 1 time series available, this one be reused for each step of the loop.  This has been implemented for  <a href="https://publicwiki.deltares.nl/display/FEWSDOC/Selection+of+independent+peaks">https://publicwiki.deltares.nl/display/FEWSDOC/Selection+of+independent+peaks</a> <a href="https://publicwiki.deltares.nl/display/FEWSDOC/Selection+of+independent+lows">https://publicwiki.deltares.nl/display/FEWSDOC/Selection+of+independent+lows</a> <a href="https://publicwiki.deltares.nl/display/FEWSDOC/Transformation+-+Sample+Equidistant">https://publicwiki.deltares.nl/display/FEWSDOC/Transformation+-+Sample+Equidistant</a>	<a href="https://publicwiki.deltares.nl/display/FEWSDOC/Selection+Transformations">https://publicwiki.deltares.nl/display/FEWSDOC/Selection+Transformations</a>	<pre>(code:xml) &lt;transformation id="SelectionIndependentPeaksMultipleForecastsTest"&gt; &lt;selection&gt; &lt;independentPeaks&gt; &lt;inputVariable&gt; &lt;variableId&gt;forecast&lt;/variableId&gt; &lt;/inputVariable&gt; &lt;forecastLoopSearchPeriod unit="week" start="4" end="0" /&gt; &lt;gapLengthInSec&gt;2700&lt;/gapLengthInSec&gt; &lt;totalNumberBeforeT0&gt;0&lt;/totalNumberBeforeT0&gt; &lt;totalNumberAfterT0&gt;0&lt;/totalNumberAfterT0&gt; &lt;skipJustBeforeT0&gt;0&lt;/skipJustBeforeT0&gt; &lt;skipJustAfterT0&gt;0&lt;/skipJustAfterT0&gt; &lt;outputVariable&gt; &lt;variableId&gt;outputForecast&lt;/variableId&gt; &lt;/outputVariable&gt; &lt;/independentPeaks&gt; &lt;/selection&gt; &lt;/transformation&gt; &lt;code&gt; &lt;/code&gt; &lt;transformation id="SelectionIndependentLowsMultipleForecastsTest"&gt; &lt;selection&gt; &lt;/selection&gt; &lt;/transformation&gt; &lt;code&gt; &lt;/code&gt; </pre>	
Plugin - Module - Transformation	Deltares	<a href="#">FEWS-16751</a>	FEWS-16827 Transformation module. Hotspot: Skip timeSeriesArray.indexOfTime on common input period and common constant input time step (ms)	Performance improvement in Transformation Module	Repaired Transformation module hotspot (Skip timeSeriesArray.indexOfTime on common input period and common constant input time step (ms))			

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Component/A	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Plugin - Module - Transformation	Deltas	<a href="#">FEWS-16753</a>	FEWS-16827 Transformation module. Hotspot MultipleTimeTransformationRunner.getInputTimes	Performance improvement in Transformation Module	Repaired hotspot in Transformation module (MultipleTimeTransformationRunner.getInputTimes)			
Plugin - Module - Verification Analyst Tool	BoM (Aus)	<a href="#">FEWS-16503</a>	FEWS-16033 Module to automatically create and manage Flood Periods			<a href="https://publicwiki.deltas.nl/display/FEWSDOC/26+Verification+Analysis+Display">https://publicwiki.deltas.nl/display/FEWSDOC/26+Verification+Analysis+Display</a>	<code>[code.xml] &lt;xml version="1.0" encoding="UTF-8"?&gt; &lt;floodPeriodsModule     xmlns="http://www.wldelft.nl/fews"     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"     xsi:schemaLocation="http://www.wldelft.nl/fews         http://fews.wldelft.nl/schemas/version1.0/floodPeriodsModule.xsd"&gt;     &lt;newFloodPeriodLogEventCode&gt;newFloodPeriod&lt;/newFloodPeriodLogEventCode&gt;     &lt;realocationAttributedId&gt;REPORT_FOLDER&lt;/realocationAttributedId&gt;     &lt;skipLocationsWithoutAreaId&gt;true&lt;/skipLocationsWithoutAreaId&gt;     &lt;expiryTime unit="day" multiplier="31"/&gt;     &lt;observed&gt;         &lt;thresholdValuesSetsCrossings&gt;             &lt;timeSeriesSet&gt;                 &lt;moduleInstanced&gt;Normalize_RiverTelemetry&lt;/moduleInstanced&gt;                 &lt;valueType&gt;scalar&lt;/valueType&gt;                 &lt;parameterId&gt;H.Obs.proc.&lt;/parameterId&gt;                 &lt;qualifierId&gt;15m&lt;/qualifierId&gt;                 &lt;locationSetId&gt;AUS_Stations_Forecast_Location&lt;/locationSetId&gt;                 &lt;timeSeriesType&gt;external_historical&lt;/timeSeriesType&gt;                 &lt;timeStep unit="minute" multiplier="15"/&gt;             </code>	
System	Deltas	<a href="#">FEWS-15778</a>	mydoggy library as FEWS module	Added mydoggy source code to the FEWS project				
System	SEQWater	<a href="#">FEWS-15785</a>	FEWS-10487 SEQwater: GA Skip export data set activity when nothing changed. (makes run workflow at startup unnecessary)	Update the exportDataSetActivity so it checks if dataset already exists	<p>Implemented solution:</p> <p>Default functionality of the exportDataSetActivity is to always overwrite existing content in the exportDataSetDir folder. Change will consist of two new configuration options in the General section:</p> <pre> &lt;element     name="updateExportDataSetDirOnlyOnChange"     type="boolean" minOccurs="0" default="false"&gt;     &lt;annotation&gt;         &lt;documentation&gt;Check all export dataset activities for changes before updating. If no change detected skip update. If change detected all datasets are updated.&lt;/documentation&gt;     &lt;/annotation&gt; &lt;/element&gt; &lt;element     name="purgeExportDataSetDirOnUpdate"     type="boolean" minOccurs="0" default="false"&gt;     &lt;annotation&gt;         &lt;documentation&gt;Option to purge content of existing module dataset dir before updating with new moduledataset. Default 'false' will result in overwriting of existing content&lt;/documentation&gt;     &lt;/annotation&gt; &lt;/element&gt;</pre>	<code>[code] &lt;xml version="1.0" encoding="UTF-8"?&gt; &lt;generalAdapterRun     xmlns="http://www.wldelft.nl/fews"     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"     xsi:schemaLocation="http://www.wldelft.nl/fews         http://fews.wldelft.nl/schemas/version1.0/generaladapterRun.xsd"&gt;     &lt;general&gt;         &lt;rootDir&gt;./junit_test_output/nl/wldelft/fews/system/plugin/generaladapter/&lt;/rootDir&gt;         &lt;workDir&gt;%ROOT_DIR%&lt;/workDir&gt;         &lt;exportDir&gt;%ROOT_DIR%/exportDir&lt;/exportDir&gt;         &lt;exportDataSetDir&gt;%ROOT_DIR%/exportDir&lt;/exportDataSetDir&gt;         &lt;purgeExportDataSetDirOnUpdate&gt;true&lt;/purgeExportDataSetDirOnUpdate&gt;         &lt;updateExportDataSetDirOnlyOnChange&gt;true&lt;/updateExportDataSetDirOnlyOnChange&gt;         &lt;exportIdMap&gt;MCRM_DODO_Forecast&lt;/exportIdMap&gt;         &lt;importDir&gt;%ROOT_DIR%/importDir&lt;/importDir&gt;         &lt;importIdMap&gt;MCRM_DODO_Forecast&lt;/importIdMap&gt;         &lt;dumpFileDir&gt;%ROOT_DIR%/.dump/&lt;/dumpFileDir&gt;</code>		
System	Deltas	<a href="#">FEWS-16958</a>	FEWS-16827 Optimize generated castor sources by using method references	Performance improvements 2017.01	Repaired unused castor classes			
System - Logging	RWS (NL)	<a href="#">FEWS-15312</a>	SystemMetrics : store system metrics as timeseries	Added new SystemMetrics module for storing live system status as timeseries.	The new SystemMetrics module can store live system information. 1. the amount of records / rows and Mb in the database, 2. the amount of records / rows and Mb in individual tables. 3. Errors, warnings (all or matching a specific eventCode such as Config.Error), 4. MC status, such as the number of running tasks, amount of live components 5. individual MC components 6. FSS build number, down status and queue	<a href="https://publicwiki.deltas.nl/display/FEWSDOC/27+SystemMetrics">https://publicwiki.deltas.nl/display/FEWSDOC/27+SystemMetrics</a>		

Delft-FEWS 2017.01 New Features								
Component/s	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
System - Logging	BoM (Aus)	<a href="#">FEWS-16318</a>	FEWS-16315 HyFS-2538: Ability to have a notification of when a new NWP has arrived in the system	Show popup in OC when log event with certain event code occurs	Like forecaster notes you can now notify all logged in users when certain log events occur		[code/xml] <rollingBarrelOption> <type>startup_only</type> </rollingBarrelOptions> <notification enabled="true"/> <forecasterNotesNotification enabled="true"/> <logEventNotification> <eventCodeId>SYNCHTASKRUN:Exec</eventCodeId> </logEventNotification> {code}	
System - PI Service	TVA	<a href="#">FEWS-16896</a>	FEWS-10616 TVA: Filter Coupling in REST Webservice	PI Webservice will always return unique time series	When using the filters for defining which time series should be returned by the PI Webservice it happens often that time series are defined multiple time in the filters. This will result in duplicate time series being returned by the pi webservice. The PI Webservice will now only return unique time series and filter duplicate time series from the output.			
System - PI Service	Deltares	<a href="#">FEWS-16960</a>	FEWS-16911 Setup build task and JUNIT tests for DD API	Setup junit tests for DD API using embedded tomcat	In accordance with the Web Service Roadmap, it is now possible to start an Embedded Tomcat instance for unit testing. This has been implemented in the new module fews-webservices. Example tests have been created for the DigitaleDelta webservice implementation.			
System - Synchronisation	Deltares	<a href="#">FEWS-16934</a>	activemq v5.14.5	Upgraded the ActiveMQ libraries from 5.11.1 to 5.14.5				
System - Workflow	FOEN	<a href="#">FEWS-16738</a>	FEWS-16464 Create Workflow parallel graph in FEWS utilities					
Utility - Configurator	Deltares	<a href="#">FEWS-16261</a>	Configurator: activemq wrapper.conf and log4j.properties	Added activemq configuration to the Configurator utility	Configurator utility now produces the activemq files: wrapper.conf and log4j.properties			
Utility - Configurator	Deltares	<a href="#">FEWS-16060</a>	Delft-FEWS set working directory from bin (ini file / launcher) to temp directory	The Delft-FEWS bin directory is no longer the current working directory for the OC/DDA/SA/CM client application.	The working directory is now set to the temp directory and not to the FEWS bin directory. This prevents that log and debug files and other files without an absolute path are polluting the FEWS bin directory. For security reasons the user doesn't need write access to the bin dir. This can effect configuration when relative paths are used. Use the %REGION_HOME% variable to make your file paths in configuration absolute.			
Utility - Configurator	Deltares	<a href="#">FEWS-16059</a>	Delft-FEWS.exe executables and ini files should no longer run from the bin directory but from the region home directory.	The Delft-FEWS bin directory is no longer the working directory for the client application, instead the temp dir is used, e.g. %REGION_HOME%/temp.	The Windows exe files Delft-FEWS.exe and .ini etc can now be placed in any directory. By this the FEWS bin directory only contains files from the build.zip. This makes replacing/upgrading the bin dir easier. The bin directory itself can now have any name for example fewsbin201701. It is no longer required to specify the region home in the ini-file when the working dir is the region home. This is automatically the case when the exe is placed in the region home. You can now have multiple patches for different FEWS versions in your region home in stand alone. This makes switching between FEWS versions easier. An example of default contents for the .ini files can be found under bin/launcher/. This example can be copied to your region home without modification. For organisations that deploy the Launcher application (nl.widelf.fews.launcher.Launcher) that supports multiple region home directories, then it is recommended to place the Delft-FEWS.exe and ini files for the Launcher one level above the region home directories. On Linux the fews.sh is available from bin/launcher/linux. It is recommended also to place that outside the bin dir. Note that it is no longer required to run a cleanup_bin.bat or cleanup_bin.sh, since several conflicting libraries are now cleanly organized in different directories. It is allowed to delete the sub directories for platforms you don't need		[code] # Copy this file and the Delft-FEWS_x64.exe to your region home # when the bin, jre and your region home are all sub directories of the same directory no adjustments are needed # use Delft-FEWS_x64.exe and Delft-FEWS_x64.ini to start with a console window to show error information on start-up # If all fails verify whether your java jre version is 64 bits, ./re/bin/java -version should contain the text "64-Bit" # Exe can be renamed. This is convenient when having multiple FEWS system so you see the difference in the Windows Task Manager # ini file should always have same name as the exe # see <a href="https://publicwiki.deltares.nl/display/FEWSDOC/02+Launching+FEWS">https://publicwiki.deltares.nl/display/FEWSDOC/02+Launching+FEWS</a> main.class=nl.widelf.fews.gui.explorer.Application classpath.1=../bin/*jar vm.location=../re/bin/server/vm.dll #start up heap memory size vmarg.1=Xms512m #max heap memory size, limited to 1024m for windows 32 bits vmarg.2=Xmx1024m	

Delft-FEWS 2017.01 New Features								
Component/s	Customer name	Key	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Config Example	Images
Water Coach	RWS (NL)	<a href="#">FEWS-16601</a>	WaterCoach: set report time to WaterCoach/system time instead of actual time	WaterCoach : printing current time in reports	When in WaterCoach mode, the report function CURRENTTIME prints WaterCoach current time, and not actual system time.			
Water Coach	BoM (Aus)	<a href="#">FEWS-15669</a>	FEWS-15665 HyFS-WC: Implement new VJDBC functionality for Watercoach	WaterCoach – computer and VJDBC information's	<p>Master WaterCoach displays the computer name and the Vjdbc port in the Gui. The participant WaterCoach shows computer name and the text "Participant" instead of Vjdbc port. See picture WaterCoach.png</p> <p>Master WaterCoach can also generate clientConfig.xml for the participants. To generate this config, use F12 option in WaterCoach display. The path and the name of the clientConfig to generate can be configured in WaterCoachDisplay.xml</p> <pre>[code:xml] &lt;clientConfigExportUrl&gt;/Deltabox/Postbox/Tacoma - Nejedla, Jitka/participantClientConfig.xml&lt;/clientConfigExportUrl&gt; [code] If 'clientConfigExportUrl' is omitted, then the destination should be selected in a 'file save' popup.</pre>			
	HHS Delfland	<a href="#">FEWS-16982</a>	HKV: Adjust slider with configuration options for stepsize and parameter resolution					