
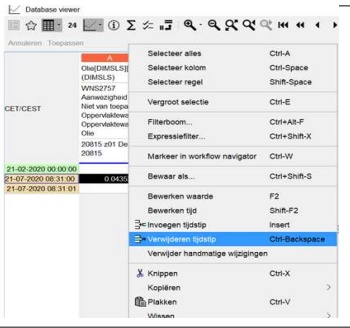
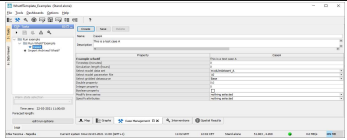
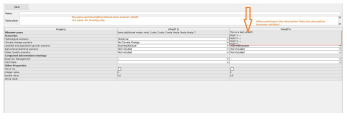
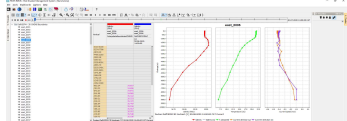
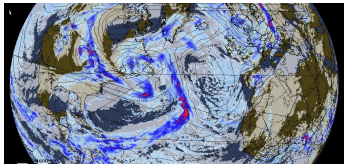


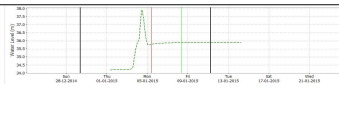
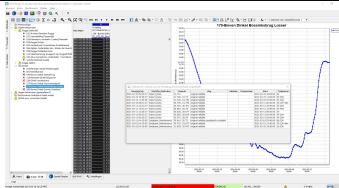
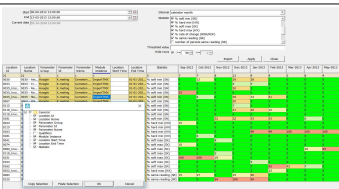
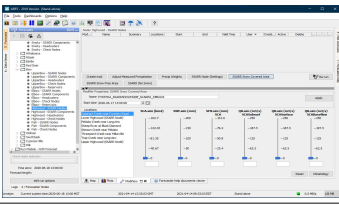
Delft-FEWS 2021.01 New Features								
Component/s	Key	Fix Version/s	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Configuration Example	Images
App - Admin Interface, System - Admin Interface API	FEWS-24029	FEWS 2021.01	MC Status in Admin Interface and API	MC Status codes are now available in Admin Interface	MC Status codes are now available in Admin Interface	https://publicwiki.deltareis.nl/display/FEWS/DOC/Master+Controllers		
App - Admin Interface, App - Master Controller Server	FEWS-24578	FEWS 2020.02, FEWS 2021.01, FEWS 2020.02 RWS	FEWS-22594 MC SystemAlerter task: allow multiple recipients in one string in the recipient element of the email alert	Allow multiple system alerter recipients on the same line	Allow multiple system alerter recipients on the same line (also supported by environment variables in mcConfig upload).	https://publicwiki.deltareis.nl/display/FEWS/DOC/Setting+up+sending+emails+on+events++2020.02+and+later	<pre> <?xml version="1.0" encoding="UTF-8" standalone="no"?> <mc-system-alerter xmlns="http://www.wildfire.nl/feWS" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.wildfire.nl/feWS http://feWS.wildfire.nl/schemas/Version1.0/mcSystemAlerter.xsd"> <alerts> <emailAlert> <recipients> <recipient email="Some.body1@somewhere.org;Some.body2@somewhere.org"/> <recipient email="JFEWS_MC_SYSTEM_ALERTER_RECIPIENTS@"/> </recipients> <configuration> <smtp fromAddress="Some.body@somewhere.org" host="smtp.mailhost.nl"/> </configuration> <subject> <subjectline content="The subject line of the email to send"/> <substitutions/> </subject> <body value="&LDIGM"/> <attachments/> </emailAlert> </alerts> </mc-system-alerter> </pre>	
App - Admin Interface	FEWS-24320	FEWS 2021.01	CM should add build number as default comments to patches	Minor improvements to CM User interface	Some minor improvements to the CM Graphical User interface were done: Delft-FEWS version and patch number have been added in the comments column, The filter checkbox is selected by default and the rows in the config manager table are sorted based on the creation time.	https://publicwiki.deltareis.nl/display/FEWS/DOC/20.1+Configuration+Manager++2017.02+and+later		
App - Admin Interface	FEWS-24552	FEWS 2021.01	FEWS-23599 Admin Interface OAUTH2 support	Admin interface has support for oauth 2 login with Azure AD	Admin interface has support for oauth 2 login with Azure AD	https://publicwiki.deltareis.nl/display/FEWS/DOC/Delft-FEWS+Admin+interface++2020.02+and+later		
App - Admin Interface	FEWS-23735	FEWS 2021.01	FEWS-24400 AI UX verbeteringen: Show/hide knop locatie en functie	menu icon has been updated to the hamburger icon (3 rows) and put in the top left location.	menu icon has been updated to the hamburger icon (3 rows) and put in the top left location.	https://publicwiki.deltareis.nl/display/FEWS/DOC/Delft-FEWS+Admin+interface++introduction		
App - Admin Interface	FEWS-24164	FEWS 2021.01	FEWS-23599 Extra functionality AI / Web API	allow deletion of base builds	Allow deletion of base builds	https://publicwiki.deltareis.nl/display/FEWS/DOC/Delft-FEWS+Admin+interface++Software+and+Configuration+Management+Delete+Base+builds+since+2021.01		
App - Admin Interface	FEWS-24242	FEWS 2021.01	Create automatic load tests scripts for Tomcat using AI Rest API	JMeter script to do performance tests on Admin Interface API	JMeter script to do performance tests on Admin Interface API. Added to Teamcity as a unit test job.	https://dpcbuild.deltareis.nl/viewType.html?buildTypeId=FEWSDevelopment_AIPerformanceTests		
App - Admin Interface	FEWS-23391	FEWS 2021.01	Version check in AI	Admin Interface will display a warning in case of a version mismatch with database	Admin Interface will display a warning in case of a version mismatch with database	https://publicwiki.deltareis.nl/display/FEWS/DOC/Delft-FEWS+Admin+interface++introduction#Delft-FEWSAdmininterface-Introduction-VersionCheck		
App - Archive	FEWS-23373	FEWS 2021.01	FEWS-22250 properties file for archive configuration	It is now possible to use an archive.properties file	It is now possible to use properties in the archive server configuration. The properties should be defined in the archive config folder and should be called archive.properties.	https://publicwiki.deltareis.nl/pages/viewpage.action?pageId=97289286		
App - Archive, System - FEWS webservices	FEWS-24173	FEWS 2021.01	FEWS-22250 FEWSWebservices - server side configuration for seamless integration external netcdf storage	Configuration options added to point out in which archive data is stored	It is now possible to define in which external data storage (open archive, external netcdf storage) time series are stored. This will improve the speed of the seamless integration because it knows where certain data is stored. In addition it is also possible now to define that the seamless integration is activated by default for requests in the WMS and the pi-webservice.	https://publicwiki.deltareis.nl/pages/viewpage.action?pageId=97289286		
App - CreateShortcuts	FEWS-24627	FEWS 2021.01	Change reference under Help Button (CreateShortcuts application)	Help Reference in CreateShortcuts Application improved	Help Reference in CreateShortcuts Application improved	https://publicwiki.deltareis.nl/display/FEWS/DOC/02+AI+anchin+FEWS		
App - Delft-FEWS	FEWS-24162	FEWS 2021.01	FEWS-23599 Config examples in basebuild	Config examples added in basebuild	Config examples added in basebuild	https://publicwiki.deltareis.nl/display/FEWS/DOC/A+anchin+Delft-FEWS++2018.02+and+later		
App - Delft-FEWS	FEWS-24163	FEWS 2020.02, FEWS 2021.01	FEWS-23599 Extra functionaliteit mc tool	encrypt tool added to mctools	The encrypt tool added to mctools to allow generating an encrypted password. The microcopy tool has been extended with a --silent flag that will prevent logging to the console.	https://publicwiki.deltareis.nl/display/FEWS/DOC/EncryptTool		

Delft-FEWS 2021.01 New Features								
Component/s	Key	Fix Version/s	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Configuration Example	Images
App - Delft-FEWS	FEWS-24165	FEWS 2021.01	FEWS-23599 Authenticatie AI via AD	Admin Interface can login using Active Directory	Admin Interface can login using Active Directory	https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Installation+-+Deploy+Admin+Interfaces+-+2020.02+and+later#Delft-FEWSInstallation-DeployAdminInterfaces-2020.02andlater-ActiveDirectoryauthenticationsince2021.01		
App - Forecasting Shell Server	FEWS-24321	FEWS 2021.01, FEWS 2020.02 RWS	FEWS-24400 Overrule global properties with environment variables	Allow referencing environment variables in global.properties	It is now possible to copy environment variables to global properties. These properties can be used as regular global properties in the xml configuration. Environment variables can easily be passed to docker containers. %REGION_HOME% is still recognized as a predefined property. Other usages of % in global.properties are now reserved for referencing environment variable. %% is translated to a literal %.	https://publicwiki.deltares.nl/x/CICE		
App - Forecasting Shell Server	FEWS-24307	FEWS 2021.01	FEWS-24400 Forecasting Shell Server should be able to run without fssLauncher	Forecasting Shell Server without fssLauncher	Forecasting Shell Server can be configured to run without fssLauncher	https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Installation+-+Install+Forecasting+Shell+Server+instances+-+2018.02+and+later		
App - Forecasting Shell Server	FEWS-23545	FEWS 2021.01	FEWS-24399 FSS: introduction ModuleRunTimes table	Duration time of last successful run calculated and stored	To enable estimation of run completion, this table registers - when configured - the duration of the last successful execution of a module instance. As soon as the workflow is started, an estimate of the pending duration is updated.	https://publicwiki.deltares.nl/x/loGE	<pre><moduleInstanceDescriptor id="Dummy"> <description>Dummy moduleInstanceDescriptor</description> <updateModuleRunTimeOnCompletion>user/updateModuleRunTimesOnCompletion</moduleInstanceDescriptor></pre>	
App - Forecasting Shell Server	FEWS-24840	FEWS 2021.01, FEWS 2020.02 RWS	FEWS-24400 Resolve environment variables in clientConfig	Referencing environment variables in clientConfig.xml	It is now possible to reference environment variable in the clientConfig.xml. %REGION_HOME% is still recognized as predefined property in the clientConfig.xml. Global properties can no longer be used in the clientConfig.xml. They did not work consistently for all elements in the clientConfig.xml	https://publicwiki.deltares.nl/x/R0YsC		
App - Master Controller Server, Database - Central Database, Database - localDataStore	FEWS-24476	FEWS 2021.01	schema - updates, add time0 column to TaskRuns table and other adjustments.	Separate database column to store the time zero of a task run.	Till now the time zero of a run was reconstructed from the scheduling information, the forecast completion properties xml and the triggered cardinal time step hidden in encodedTaskRepeatTime column. This gives issues when the scheduling information is changed afterwards or when the forecast length estimator changes the timeZero for a import run that does not have a completion properties xml. The time zero set by the forecast length estimator is now visible before the end of the run. For triggered tasks the MC can now set time zero explicitly without setting the cardinal time step in the encodedTaskRepeatTime column For backward compatibility the old method is used when the new timeZero column contains a null.			
App - Master Controller Server	FEWS-24306	FEWS 2021.01	FEWS-24400 Allow running Master Controller without mcLauncher	Master Controller can start without Launcher	The Master Controller component can be configured to start without McLauncher component. Meant for Docker environments.	https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+Installation+-+Configure+Master+Controller+Launchers+-+2020.02+and+later		
App - Operator Client Gui (Explorer)	FEWS-23087	WarmingUp, FEWS 2021.01	FEWS-23086 CustomDisplayPlugin for java-application					
App - Operator Client Gui (Explorer)	FEWS-24438	FEWS 2020.02, FEWS 2021.01	FEWS-19373 JCEF package update - February 2021	A updated JCEF (Java Chromium Embedded Framework) package (chromium 88.0.4324, Feb 2021) has been provided to update the embedded web browser in FEWS.	A updated JCEF (Java Chromium Embedded Framework) package (chromium 88.0.4324, Feb 2021) has been provided to update the embedded web browser in FEWS. In addition to the usual security updates provided by the chromium package a few related new features have been added to the FEWS 2020.02 release: <ul style="list-style-type: none"> - the update of the JCEF package is optional - the chrome developer tool can be used for troubleshooting of web applications - the downloads folder can be configured. 	https://publicwiki.deltares.nl/display/FEWS/DOC/24+Web+Browser+Display		

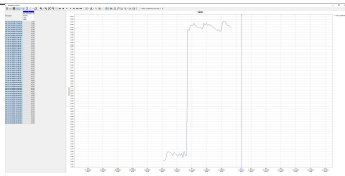
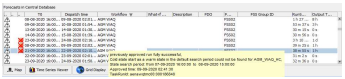
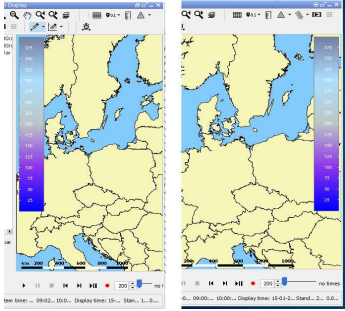
Delft-FEWS 2021.01 New Features								
Component/s	Key	Fix Version/s	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Configuration Example	Images
App - Operator Client Gui (Explorer)	FEWS-24416	FEWS 2021.01	FEWS-21828 Roadmap: Make a F12 function that logs when a FEWS system uses Obsolete or Legacy functions or modules	Explorer F12 function to log obsolete Explorer and workflow plugins	The obsolete Explorer and workflow plugins can be logged using the function F12 -> T Export -> log obsolete modules and explorer plugins This function scans all module config files and all display config files to detect the obsolete configuration. Also the explorerTask's without <displayConfigFileName> are scanned. When any obsolete plugin is detected, the following message is logged (an example) : INFO - WhatIfScenarioDisplay is obsolete and not supported anymore in Fews version 2023.01 [https://publicwiki.deltares.nl/display/FEWSDOC/04+Lookup+Table+Display] The version (2023.01) and the additional text, for example a link to the documentation, is included in the Fews code.	https://publicwiki.deltares.nl/display/FEWSDOC/The+F12+menu		
App - Operator Client Gui (Explorer), System Language files	FEWS-24515	FEWS 2020.02, FEWS 2021.01	FEWS-BMA: Add Thai font type to FEWS	Thai language files added	Thai language files are added. LANGUAGE=th COUNTRY=TH			
App - Operator Client Gui (Explorer)	FEWS-24266	FEWS 2021.01	Facilitate GUI look & feel using Flatlaf	New GUI look: flat look & feel	New libraries added for a (Windows 10) 'flat' look and feel. This is the default look & feel for both Windows and Linux. More information on the used libraries can be found here: [https://www.formdev.com/flatlaf/#https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.formdev.com%2Fflatlaf%2F&data=04%7C01%7C7C7C8ac55d49bcfb41d9a40848bd1cb460%7C15f3fe0ed7124981bc7cfe949af215bb%7C0%7C637467278268323914%7CUnknown%7CTWFpbGZsb3d8eyJWlwiMC4wLjAwMDAilCjQjoiV2luZlIjCjB1IiGik1haWwILCjVCI6Mn0%3D%7C1000&sdata=8RjdwWIZ53%2B0N4cunajrOAmvWo5jadpTUn7Em2BtguY%3D&reserved=0]			
Configuration	FEWS-21807	FEWS 2020.02, FEWS 2021.01	Ability to connect attribute csv file to database based locationSet	Reference external database table with location attributes from LocationSets.xml	In the locationSets.xml <attributes> an (external) database table can now be referenced instead of a csv file.	https://publicwiki.deltares.nl/display/FEWSDOC/22+Locations+and+Attributes+defined+in+CSV+files%2C+Shape+DB+files+or+external+tables		
Configuration	FEWS-22130	FEWS 2021.01	FEWS-22129 ComposedWhatif: enable configuration whatif definition blocks	Design WhatifTemplates.xsd and associated implementations				
Database - Datastore	FEWS-23659	FEWS 2021.01	FEWS-23658 Assist/review database / JSON schemas MongoDB					
Database - Datastore	FEWS-22645	FEWS 2020.02, FEWS 2021.01	FEWS-22632 Handmatig beheer van meetwaarden is mogelijk per stuk (correctie of verwijderen record) of voor meerdere tegelijk (verwijderen records) - sprint 5 - prio 1	Since 2020.02 it is possible to edit sample values directly from the sample viewer.	Since 2020.02 it is possible to edit sample values directly from the sample viewer. To enable this the sampleViewer needs its own configuration file with <enableEditor=true/>enableEditor. It is also possible to out a permission on the editing.	https://publicwiki.deltares.nl/display/FEWSDOC/18+Sample+Viewer#id-18SampleViewer-Editsamples(since2020.02)		
Database - localDataStore	FEWS-24035	FEWS 2021.01	Visualize partly current workflows, handle workflows that are sharing module instance ids	New icon in the forecast manager for current forecasts where some output is overruled by another workflow	Behind the scenes only module runs can be made current, not forecasts. When two workflows share the same module instances for simulated data one workflow overrules the current data from an existing current workflow. The feature allows you to run a sub-workflow without running the complete forecast. Sometimes a simulated module instance id is shared between workflows by mistake. The new icon makes users aware of the shared module instance id and that some of the simulated output is no longer current.			

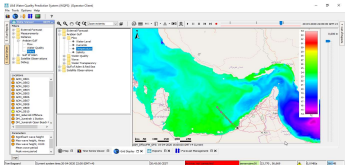
Delft-FEWS 2021.01 New Features								
Component/s	Key	Fix Version/s	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Configuration Example	Images
Module Adapter - Calibration	FEWS-23607	FEWS 2021.01	FEWS-17002 Generate OpenDA config from FEWS	By specifying observed and simulated time series FEWS can calibrate workflows via module parameter modifiers	By specifying observed and simulated time series FEWS can calibrate workflows via module parameter modifiers by letting the external software package OpenDA calculate the error between the observed and simulated time series and suggest new parameters for FEWS to rerun the workflow. This will continue until the error is minimized, a minimized error will be a sign of optimal parameters. The calibration will apply to the same workflow that is connected to the IFD node.	https://publicwiki.deltares.nl/display/FEWS/DOC/Auto+Calibration		
Module Adapter - Calibration	FEWS-23606	FEWS 2021.01	FEWS-17002 FEWS OpenDA Calibration panel	By specifying observed and simulated time series FEWS can calibrate workflows via module parameter modifiers	By specifying observed and simulated time series FEWS can calibrate workflows via module parameter modifiers by letting the external software package OpenDA calculate the error between the observed and simulated time series and suggest new parameters for FEWS to rerun the workflow. This will continue until the error is minimized, a minimized error will be a sign of optimal parameters. The calibration will apply to the same workflow that is connected to the IFD node.	https://publicwiki.deltares.nl/display/FEWS/DOC/Auto+Calibration		
Module Adapter - Calibration	FEWS-23608	FEWS 2021.01	FEWS-17002 Let FEWS run workflow with modifiers attributes based on OpenDA calculations	By specifying observed and simulated time series FEWS can calibrate workflows via module parameter modifiers	By specifying observed and simulated time series FEWS can calibrate workflows via module parameter modifiers by letting the external software package OpenDA calculate the error between the observed and simulated time series and suggest new parameters for FEWS to rerun the workflow. This will continue until the error is minimized, a minimized error will be a sign of optimal parameters. The calibration will apply to the same workflow that is connected to the IFD node.	https://publicwiki.deltares.nl/display/FEWS/DOC/Auto+Calibration		
Module Adapter - DIMR	FEWS-25274	FEWS 2021.01	FEWS-BMA: Add Delft3D-RR support to DIMR Adapter					
Plugin - GUI - Annotations Panel	FEWS-23758	FEWS 2021.01	FEWS-22228 Add, edit, delete annotations based on permissions	Annotations: edit, add and delete based on permissions	Annotations: edit, add and delete based on permissions	https://publicwiki.deltares.nl/display/FEWS/DOC/30+Annotation+Display		
Plugin - GUI - Annotations Panel	FEWS-23759	FEWS 2021.01	FEWS-22228 Extend import and export for annotations	Annotations: import and export	Annotations can be imported and exported (via CSV files)	https://publicwiki.deltares.nl/display/FEWS/DOC/Import+Module+configuration+options+Annotationlocalionsetid		
Plugin - GUI - Annotations Panel	FEWS-23756	FEWS 2021.01	FEWS-22228 Add time series with valueType "text"	Annotations: new valueType added	To support the Annotation concept, a new valueType ("text") was needed. This has been added to the central database.	https://publicwiki.deltares.nl/display/FEWS/DOC/30+Annotation+Display		
Plugin - GUI - ComposedWhatif	FEWS-24542	FEWS 2021.01	FEWS-21063 WhatifEditor: keep editable until saved persistently with taskrun					
Plugin - GUI - ComposedWhatif	FEWS-24188	FEWS 2021.01	FEWS-21063 WhatifTemplates: apply modifiers					
Plugin - GUI - ComposedWhatif	FEWS-23939	FEWS 2021.01	FEWS-22165 Whatif: hide pattern in dropdown	WhatifTemplates and the option "hidePattern"	Value type configFile has, in addition to the option pattern, also an option hidePattern If this option is set to true, then the dropdown box in the Whatif editor shows the configFile names without the configured pattern If this option is omitted or set to false, then the dropdown box in the Whatif editor shows the full configFile name. Note that the (optional) config file suffix 'Default' is never shown. An example: If we configure <configFile id="coldStateFiles" type="cold state" pattern="run_ribasim*" hidePattern="true"/> and the cold state file name is run_ribasim_WQland Default.zip, then the dropdown box shows ".WQland". If hidePattern="false", the dropdown box shows 'run_ribasim_WQland'			
Plugin - GUI - ComposedWhatif, Plugin - GUI - IFD - Forecasts	FEWS-24387	FEWS 2021.01	FEWS-21063 IFD-Topology dynamically builds up sub-nodes with whatif-instances					
Plugin - GUI - ComposedWhatif	FEWS-24584	FEWS 2021.01	FEWS-21063 WhatifEditor: apply defaults at startup	WhatifEditor: default properties values	Each value type has an attribute default value. When creating a new what-if, this default values are shown in the properties rows Whatif Editor			

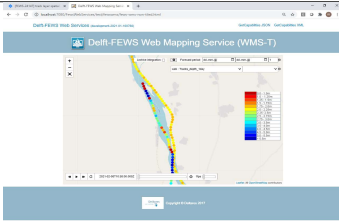
Delft-FEWS 2021.01 New Features								
Component/s	Key	Fix Version/s	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Configuration Example	Images
Plugin - GUI - ComposedWhatif	FEWS-24514	FEWS 2021.01	FEWS-21063 Whatif: distinction between name and description					
Plugin - GUI - ComposedWhatif	FEWS-23998	FEWS 2021.01	FEWS-22165 WhatifTemplates: allow multiple config files	WhatifTemplates and multiple config files	The multiple WhatifTemplates.xml are allowed. The templates in separate files may share the value types. For example, it is possible to configure all value types in WhatifTemplates_A.xml. The whatifTemplate configured in WhatifTemplates_B.xml may refer to the value types configured in WhatifTemplates_A.xml There is presently one restriction: every WhatifTemplates.xml must have at least one value type, since <valueTypes> is an obligatory element. Config example is available in MultipleWhatifTemplates.zip			
Plugin - GUI - ComposedWhatif, Plugin - Module - General Adapter	FEWS-23988	FEWS 2021.01	FEWS-21063 GA/whatif: allow export of moduleDataSets without configuring moduleInstanceCids	Allow export of ModuleDataSet files without moduleInstanceDescriptors registration	The exportDataSetActivity of the General Adapter is extended to allow exporting of a moduleDataSet file by filename without the need to register this moduleDataSet in the ModuleInstanceDescriptors. This feature aligns with the new Whatif- functionality, where properties can be used to select a moduleDataSet file based on a filename pattern. The allows new whatif-choices to be added to a stand-alone or computational framework application without the need to adjust other configuration files (i.e. moduleInstanceDescriptors),		<pre>(code) <exportDataSetActivity> <moduleDataSetName>MModuleDataSetFile/moduleDataSetName </exportDataSetActivity> (code)</pre>	
Plugin - Gui - Dashboard	FEWS-24581	FEWS 2020.01, FEWS 2021.01	FEWS-23579 store plotid instead of plotname in dashboard/usersettings.ini					
Plugin - Gui - Grid Display, Plugin - GUI - IFD - Forecasts	FEWS-24454	FEWS 2021.01	FEWS-21063 IFD-Spatial Display updates based on selected whatif node					
Plugin - Gui - Grid Display	FEWS-23817	FEWS 2020.02, FEWS 2021.01, FEWS 2020.02 RWS	TSD Allow "on the fly" vertical profiles and domain parameter vertical profiles in the same plot	Allow all types of vertical profiles in the same plot.	Fews supports two types of vertical profiles. <ol style="list-style-type: none"> "on the fly" vertical profiles that are stored as multiple regular scalar time series that share the same parent location vertical profiles that are stored as a single time series with a domain parameter z. Both types can now be displayed in the same plot together. 			
Plugin - Gui - Grid Display	FEWS-24510	FEWS 2021.01	NGMS: singleLocationDisplay config option in spatial display	Spatial display. Configure multiple plot nodes at once.	You can now configure a plot node for every child of a location at once.		<pre>(code)xml <plotGroup id="PlotGroup"> <singleLocationGridPlots id="PlotGroup1 Plot0"> <dataLayer> <timeSeries> <moduleInstanceCid>import/moduleInstanceCid (code)</pre>	
Plugin - Gui - Grid Display	FEWS-24612	FEWS 2021.01	Base isolines on pixels instead of grid cells	Smooth contours for multiple domain flexible mesh grids.	Contours in the grid display is now possible for irregular grids and for joining grids (multiple domains). When the contour button is pressed bilinear interpolation is used to calculate a value for every pixel individually. The grid cell for every pixel at the current map extent and zoom level is known by the grid display. The neighbour cell detection is done at screen pixel level and works for existing configurations. The interpolation is automatically switched off for individual cells that are not rectangular or rotated more than 10 degrees compared to the screen. The contours are calculated for the interpolated pixel values for the current zoom extent			
Plugin - GUI - IFD - Forecasts, Plugin - Gui - Time Series	FEWS-24453	FEWS 2021.01	FEWS-21063 IFD-timeseries display updates based on whatif node selection	The time series display displays the time series of the selected what-ifs	The time series display now listens to which what-if are selected in the forecast selection (IFD) panel. The time series of the selected what-ifs are now displayed together with the current time series in the time series display.	https://publicwiki.deltares.nl/display/FEWS/DOC/07+Display+Configuration		
Plugin - Gui - Map	FEWS-25140	FEWS 2021.01	Merge gt-*.jar to single jar to reduce classpath length	Reduce number of jars to reduce classpath length	A smaller number of jars allows a longer bin dir pathname. Bin dir validator now also checks the bin dir pathname length to prevent class not found errors.			
Plugin - GUI - Sample Viewer	FEWS-11737	FEWS 2021.01	FEWS-22632 Filtering for samples, enable filtering in time - sprint 3 - prio 1	Since 2021.01 it is possible filter samples on time	Since 2021.01 it is possible filter samples on time, for this start and end time date choosers are added on top of the samples panel	https://publicwiki.deltares.nl/display/FEWS/DOC/18+Sample+Viewer#18SampleViewer-Seasonandtimefiltering		

Delft-FEWS 2021.01 New Features								
Component/s	Key	Fix Version/s	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Configuration Example	Images
Plugin - GUI - Sample Viewer	FEWS-24654	FEWS 2021.01	FEWS-22632 Make predefined periods configurable - sprint 3 - prio 2	Since 2021.01 it is also possible to define a list of seasons for filtering of samples	Since 2021.01 it is also possible to define a list of seasons for filtering of samples, this will make a dropdown list appear on top of the sample viewer.	https://publicwiki.deltares.nl/display/FEWS/DOC/18+Sample+Viewer#id-18SampleViewer-Seasonfiltering		
Plugin - GUI - Sample Viewer	FEWS-24893	FEWS 2020.02, FEWS 2021.01	FEWS-22632 Editor permissions for SampleDisplay.xml					
Plugin - GUI - Schematic Status Display, System - FEWS webservices	FEWS-24516	FEWS 2020.02, FEWS 2021.01, FEWS 2020.02 RWS	FEWS-23543 Schematic status displays: cycle symbols in the svg with thresholds	A new option has been implemented for Schematic Status Displays (SSD/Scada) that allows the swapping of graphic elements linked to thresholds.	A new option has been implemented for Schematic Status Displays (SSD/Scada) that allows the swapping of graphic elements linked to thresholds. This involves SVG <use/> elements that are linked to graphic element in de <defs/> part of a SVG document by ID.	https://publicwiki.deltares.nl/pages/viewpage.action?pageId=8684020		
Plugin - GUI - Time Series	FEWS-23676	FEWS 2019.02, FEWS 2020.01, FEWS 2020.02, FEWS 2021.01	FEWS-10487 Add vertical lines for (systemTime/TO/displayTime) to long term scroller.	Vertical lines for System time and Display time to long term scroller.	Vertical lines for System time and Display time to long term scroller. Especially useful for combination with special plots that do not have a normal TSD graph and thus no vertical lines for System and display time.	https://publicwiki.deltares.nl/display/FEWS/DOC/04+Data+Display+and+Data+Editor#id-04DataDisplayandDataEditor-LongTermScroller		
Plugin - GUI - Time Series	FEWS-24571	FEWS 2021.01	Extend popup window header info for Show history (CTRL+H) with time(period)	Since 2021.01 the history popup will show the times of the selected data in the title	Since 2021.01 the history popup will show the times of the selected data in the title	https://publicwiki.deltares.nl/display/FEWS/DOC/04+Data+Display+and+Data+Editor#id-04DataDisplayandDataEditor-Historypopup		
Plugin - GUI - Time Series	FEWS-23880	FEWS 2019.02, FEWS 2020.01, FEWS 2020.02, FEWS 2021.01	Option in TSD to undelete removed nonequidistant values	Undelete time steps in non-equidistant in time series dialog	A time step from a non-equidistant time series that is manually deleted is skipped on re-import. It is now possible to show the deleted time steps in the time series dialog. After unchecking you can restore the deleted time steps.	https://publicwiki.deltares.nl/display/FEWS/DOC/04+Data+Display+and+Data+Editor		
Plugin - GUI - Time Series	FEWS-24457	FEWS 2020.02, FEWS 2021.01	Vertical profiles: auto scaling vertical axis	Automatic vertical axis scaling for vertical profiles.	Like regular time series automatic scaling is now also possible for vertical profiles in the time series dialog.			
Plugin - GUI - Time Series	FEWS-22542	FEWS 2020.02, FEWS 2021.01	FEWS-22536 NWS: #46491 Ability to remove unwanted imported time series from SA datastores	Default grid time series synch levels	By default grid time series now get synch level 2 (external) and 6 (simulated). Only applies when no explicit synch level is configured in the time series set. This makes it possible to filter out grids while making a database snapshot also when there is no synch level configuration. A new debug menu option "database - repair grid synch levels" is added to convert the 0 and 1 synch levels of grid time series to 2 and 6 for existing databases. Synch levels 0 and 1 for grid time series are no longer allowed.	https://publicwiki.deltares.nl/x/SoGE		
Plugin - GUI - Time Series Interval Statistics	FEWS-24211	FEWS 2019.02, FEWS 2020.02, FEWS 2021.01	Extra location attributes to interval statistics display	Starting from 2019.02 you can add extra columns based on location attributes to the display.	Starting from 2019.02 you can add extra columns based on location attributes to the display. For this, the user needs to right-click on the table and "Select columns" (or shortcut key F8). The selected columns will be stored in the user settings.	https://publicwiki.deltares.nl/display/FEWS/DOC/28+Interval+Statistics+Dialog		
Plugin - GUI - Time Series Modifier	FEWS-24768	FEWS 2020.02, FEWS 2021.01	FEWS-24767 Order of Compound Modifiers seems random	The order of the parameters in the gui is now always as configured	When qualifiers were used for the compound modifier the order of the parameters in the modifier panel were random. This is now fixed. The order is now also the order as used in the config.	https://publicwiki.deltares.nl/display/FEWS/DOC/25+ModifierTypes		
Plugin - GUI - Topology Editor	FEWS-24229	FEWS 2021.01	TopologyEditor: network info tab					

Delft-FEWS 2021.01 New Features								
Component/s	Key	Fix Version/s	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Configuration Example	Images
Plugin - Module - Archive, Plugin - Module - Data Export	FEWS-23650	FEWS 2021.01, FEWS 2020.02 RWS	FEWS-24398 NetCDF export: allow export location attributes (as variable like stationids)	NetCDF export: allow export location attributes	NetCDF export: allow export location attributes Feature is supported by archive export and all NetCDF export types: NetcdfScalarTimeSeriesSerializer NetcdfMatroosScalarTimeSeriesSerializer NetcdfScalarNonEquidistantTimeSeriesSerializer NetcdfVerticalProfileSerializer NetcdfGridTimeSeriesSerializer NetcdfZLayersTimeSeriesSerializer NetcdfDomainTimeSeriesSerializer	https://publicwiki.deltares.nl/display/FEWS/DOC/Export+module+Export+module+exportLocationAttributeAsNetCDFVariable	<pre>(code.xml) <export> <general> <exportType>NETCDF_CF_TIME SERIES</exportType> <folder>_junit_test_output\N\widsft\ews\system\plugin\data\export\TimeSeriesExportTs </exportType> <exportLocationAttribute>locationAttribute</exportLocationAttribute> <exportFileName> <name>netcdf_timeSeries.nc</name> </exportFileName> <idMapId>Netcdf-IdMapId </idMapId> <exportMissingValueString>9999.0</exportMissingValueString> </general> <exportLocationAttributeAsNetCDFVariable> <ncVariableLocationAlias>ncVariable </ncVariableLocationAlias> <attributeName>ncAttribute </attributeName> </exportLocationAttributeAsNetCDFVariable> <timeSeriesSet> ... </timeSeriesSet> </export> </TimeSeriesExportRun> </code> (code.xml) <exportServer> <general> <archiveFolder>SARCHIVE_DIRS</archiveFolder> <createMethod>start="S" end="O" unit="day">relativePeriod</createMethod> </general> <activities> <netcdfExportActivity> <netcdfExportActivity> <fileName>ncFile </fileName> </netcdfExportActivity> </netcdfExportActivity> </activities> <exportLocationAttributeAsNetCDFVariable> <ncVariableLocationAttribute>ncVariable </ncVariableLocationAttribute> </exportLocationAttributeAsNetCDFVariable> </pre>	
Plugin - Module - Data Export	FEWS-23702	FEWS 2021.01	FEWS-24399 Export: add description to export meta data	Time series Export - keywords %TASK_DESCRIPTION% and %WHAT_IF_NAME% can be also used in the section <ncMetadata>	Besides in the config file TimeSeriesExportRun.xml, this keyword can be also used in the section <ncMetadata> of the config file ExportArchiveModule.xml	https://publicwiki.deltares.nl/display/FEWS/DOC/Export+module		
Plugin - Module - Data Export	FEWS-11733	FEWS 2020.01, FEWS 2021.01	FEWS-22632 export UM-Aquo: flexible writing of (sample)attributes (serializer) - sprint 2 - prio 4				<pre><equalHeaderColumn name="QualifierID" prefix="IC_" defaultvalue="testDefaultValue2"/> <doubleNumberColumn name="testLineColumn" /> </pre>	
Plugin - Module - Data Import	FEWS-22642	FEWS 2020.01, FEWS 2021.01	FEWS-22632 Import/export alphanumerice waarde - sprint 2 - prio 3	Alphanumerical values are now shown in the sample viewer with their text	Alphanumerical values are now shown in the sample viewer with their text	https://publicwiki.deltares.nl/display/FEWS/DOC/18+Sample+viewer+id-18SampleViewer-SeasonsFiltering		
Plugin - Module - Data Import	FEWS-23837	FEWS 2018.02, FEWS 2019.02, FEWS 2020.01, FEWS 2020.02, FEWS 2021.01	WIWB - request to import an older (not the most recent) forecast	For each externalForecastTimesCardinalTimeStep within externalForecastTimesSearchRelativePeriod, multiple external forecasts are requested to be imported.	For each externalForecastTimesCardinalTimeStep within externalForecastTimesSearchRelativePeriod, multiple external forecasts are requested to be imported. This way it is possible to import data for multiple (older) forecast times and not just the most recent. Only supported by specific import types, like WIWB.	https://publicwiki.deltares.nl/display/FEWS/DOC/Import+Module+configuration+options+importModuleconfigurationoptions+externalForecastTimesSearchRelativePeriod+externalForecastTimesCardinalTimeStep	<pre>Extra choice instead of relativePeriod in general section of import (code.xml) externalForecastTimesSearchRelativePeriod units="day" start="1" end="0" startDernVariable="true"/> externalForecastTimesCardinalTimeStep units="hour" multiplier="12"/> </code> </pre>	
Plugin - Module - Data Import	FEWS-24408	FEWS 2020.02, FEWS 2021.01	FEWS-24406 FEWS-Itaipu: Import GRADS data	New import type: GRADS	Reader for ingesting of gridded time series from the GRADS files. The reader reads first the Ascii meta data file with a description of the binary data. This description is used to read the binary data file. The meta data file must have an extension .ctl, and both .ctl file and binary file must be in the same folder. The detailed description of the GRADS files can be found on [http://cola.gmu.edu/grads/gadoc/aboutgriddeddata.html] Important to know: The GRADS reader does not support all features from the meta data file. The reader supports only LINEAR grid mapping and only a single level (Z dimension). As for the variable records, only the variable name is read from these records			

Delft-FEWS 2021.01 New Features								
Component/s	Key	Fix Version/s	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Configuration Example	Images
Plugin - Module - Data Import	FEWS-24607	FEWS 2020.02, FEWS 2021.01	FEWS-BMA: New JSON import for observed BMA data			https://publicwiki.deltares.nl/display/FEWS/DOC/BMALatest+Import	<pre> <code> <?xml version="1.0" encoding="UTF-8"?> <!-- edited with XMLSpY v2014 r4: 2 v11 (http://www.altova.com) by Afsteleg ICT (Dutching Deltares) --> <timeSeriesImportRun xmlns="http://www.widelft.nl/feWS" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.widelft.nl/feWS http://feWS.widelft.nl/schemas/version1.0/timeSeriesImportRun.xsd"> <import> <general> <importType>BMALatest</importType> <serverUrl>http://weather.bangkok.go.th/dds_webservices/cgi/rain/lastdata/<serverUrl> <!-- this field is not used, but it is necessary to be able to configure connection timeout --> <backupServerUrl>http://weather.bangkok.go.th/dds_webservices/cgi/rain/lastdata/backup ServerUrl <!-- if this field is not configured, it will be set at 10000 automatically --> <connectionTimeOutInMillis>1000000</connectionTimeOutInMillis> <username>user</username> <password>PassWord</password> <relativeViewPeriod>units="day" start="2" end="1" startOverridable="true" endOverridable="true"/> <idMapId>BMALatestAge</idMapId> <missingValue>999.0</missingValue> </general> <timeSeriesSet> <moduleInstanceId>BMALatest</moduleInstanceId> <valueType>scalar</valueType> <parameterId>param1</parameterId> <locationId>LocA</locationId> <timeSeriesType>external historical</timeSeriesType> <timeStep>units="nonequidistant"/> <readWriteMode>add original</readWriteMode> <syncLevel>1</syncLevel> </timeSeriesSet> </timeSeriesSet> </moduleInstanceId>BMALatest</moduleInstanceId> <valueType>scalars</valueType> </pre>	
Plugin - Module - Data Import	FEWS-23703	FEWS 2021.01	FEWS-22250 Import NetCDF References while NetCDF file on openpad is not available yet	Configure future NetCDF url on importing NetCDF file grid references	When a netcdf file is created in a workflow an external process is often moving this file to the final openpad location later on. This future file url can now be configured. The data becomes visible in the OC as soon the netcdf file is moved to the final location.			
Plugin - Module - Data Import	FEWS-24374	FEWS 2020.02, FEWS 2021.01	WIS: Bij migreren van oude WIS database naar nieuwe ook validatiestatus meenemen	FEWSDatabase import type now imports all new time series columns for scalars and grids	In recent years we added a lot of new columns to the time series. value range, time range, custom flag source columns, value properties. The new columns are now also imported by the FEWSDatabase import type			
Plugin - Module - Data Import	FEWS-24054	FEWS 2020.02, FEWS 2021.01	FEWS-24053 API import for SENCROP sensors	support imports with the Sencrop API	support imports with the Sencrop API	https://publicwiki.deltares.nl/display/FEWS/DOC/Sencrop		
Plugin - Module - Data Import	FEWS-20301	FEWS 2020.01, FEWS 2021.01	FEWS-14730 Connect to MQTT protocol for receiving data (R_301)	Azure IOT Hub Import for messages in the PI XML Format	Azure IOT Hub Import for messages in the PI XML Format.	https://publicwiki.deltares.nl/display/FEWS/DOC/AzureIotHub		
Plugin - Module - Data Import	FEWS-23601	FEWS 2021.01	FEWS-24053 Soil moisture sensors: API imports (SENSOTERRA AND FARM21)	Farm21 import supported	Farm21 import is now supported as importType: +Farm21+	https://publicwiki.deltares.nl/display/FEWS/DOC/Farm21		
Plugin - Module - General Adapter, System-Logging	FEWS-23986	FEWS 2020.01, FEWS 2021.01	FEWS-17145 Add name/group of coldState used in General Adapter to log	The cold state found in the general adapter will now be logged in debug	The cold state found in the general adapter will now be logged in debug	https://issuetracker.deltares.nl/browse/FEWS-23986		
Plugin - Module - Reports	FEWS-23497	FEWS 2020.01, FEWS 2021.01	Legend bar text improvements for grid display and snapshots reports	GridDisplay and spatialPlotSnapshots report : new options to customize bar legend	Three new options has been added to the barLegend: * labels.Color - color of the tick labels. If omitted then the outside labels are black and the inside labels are white, * labels.BackgroundColor - background color of the tick labels, * labels.OpaquenessPercentage - transparency(opaqueness) of the background of the tick labels. 0% is completely transparent and 100% is completely opaque. If omitted then the background is completely opaque. Please *note* that the options labels.BackgroundColor and labels.OpaquenessPercentage are implemented only for outside labels .	https://publicwiki.deltares.nl/display/FEWS/DOC/01+Grid+Display+id-01+Grid+Display+bar+Legend	<pre> <code> <barLegend> <position>right</position> <width>50</width> <length>400</length> <labelsInside>false</labelsInside> <labelsColor>blue</labelsColor> <labelsBackgroundColor>yellow</labelsBackgroundColor> <labelsOpaquenessPercentage>50</labelsOpaquenessPercentage> </barLegend> </pre>	
Plugin - Module - Reports	FEWS-23208	FEWS 2021.01	Create unit tests for threshold reports	Unit test for thresholds reports added	Unit test for thresholds reports added	https://publicwiki.deltares.nl/display/FEWS/DOC/09+Report+Module		
Plugin - Module - Reports	FEWS-23577	FEWS 2021.01, FEWS 2020.02 RWS	FEWS-23543 Reports: use display id from displayGroups for chart export in report module	In the report module, a new <displayChart/> element can be used to insert a chart by direct reference to an existing display ID	In the report module, a new <displayChart/> element can be used to insert a chart by direct reference to an existing display ID in the DisplayGroups configuration. This way there is no need to manually reconfigure such charts specifically for the report and the charts will look mostly the same as they do in the TimeSeries Display (TSD)	https://publicwiki.deltares.nl/display/FEWS/DOC/09+Report+Module	<pre> <code> <displayChart width="400" height="400" id="displayChart1"> <displayId>endDisplay</displayId> </displayChart> </code> </pre>	

Delft-FEWS 2021.01 New Features								
Component/s	Key	Fix Version/s	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Configuration Example	Images
Plugin - Module - Reports	FEWS-24187	FEWS 2019.02 EA, FEWS 2021.01	FEWS-18050 Report: Add options element to generatePDF in reports	More options to generate pdf in report module	Allow specifying command line options for wkhtmltopdf.exe with the new generatePdf(CommandLineOptions) element. eg. --orientation Landscape	https://publicwiki.deltares.nl/display/FEWS/DOC/Generate+PDF+from+HTML+report		
Plugin - Module - Transformation	FEWS-24360	FEWS 2019.02, FEWS 2020.02, FEWS 2021.01	XML schema value element under percentileExceedence does not accept template property	Percentile schema element for transformations now accepts properties within \$S	Percentile schema element for transformations now accepts properties within \$S	https://publicwiki.deltares.nl/display/FEWS/DOC/20+Transformation+Module+-+improved+schema		
Plugin - Module - Transformation	FEWS-23422	FEWS 2021.01	FEWS-16169 FEWS Wales: FEWS Spatial interpolation grid to polygon					
Plugin - Module - Transformation	FEWS-23801	FEWS 2020.02, FEWS 2021.01	FEWS-23777 Introduce bed level concept	Location bed level	A location can now have a bed level attribute. This bed level can be used in vertical interpolation/aggregation transformation.			
Plugin - Module - Transformation	FEWS-23648	FEWS 2020.01, FEWS 2021.01	FEWS-23777 Transformation Module - Vertical interpolation/averaging for scalar (z-layers)	new transformation for vertical interpolation/averaging for scalar (z-layers)	This transformation calculates a weighted average of a parameter (for example water temperature) measured at the same location, but at different heights (different z layers). The (water) depth is divided into layers. The weight of the temperature is the thickness of the layer it was measured in. The area that should be averaged is configurable. This area can contain more layers, partial layers, or a single (partial) layer. If the area contains a partial layer, the weight of that layer is only the part that is included in the calculation. If the area start and end are the same the transformation simply extracts the temperature of one layer from a scalar map into a scalar time series. The area of the calculation can be counted from a standard point of comparison (0 m) or the current water level, which changes in time. Input waterLevelReference is optional. If waterLevelReference is configured the starting point of the top water layer should be updated with each time step to match the water stand.	https://publicwiki.deltares.nl/display/FEWS/DOC/Average+Scalar+Vertical+Layers	<pre>(code=java) <?transformation id="StatisticsVerticalAverageScalarZLayerFunction"> <statisticsVerticalLayers> <averageScalarVerticalLayers> <input> <variable>input</variable> </input> <waterLevelReference> <variable>waterLevelReference</variable> </waterLevelReference> <startDepth> <startDepth> <endDepth> <endDepth> <outputVariable> <variable>output</variable> </outputVariable> </averageScalarVerticalLayers> </statisticsVerticalLayers> </transformation> </transformableModule> (code)</pre>	
Plugin - Module - Transformation	FEWS-23649	FEWS 2020.01, FEWS 2021.01	FEWS-23777 Transformation Module - Vertical interpolation/averaging for grids (z-layers)	Implement new transformation for averaging values from different Z-layers in a grid	This transformation calculates a weighted average of a parameter (for example water temperature) measured at the same location, but at different heights (different z layers). Each Z layer is represented by a TimeSeriesSet. (They have to have the same geometry). The entire (water) depth is divided into layers. The z layers are the center points of these water layers. In the average calculation the weight of the parameter is the thickness of the water layer it was measured in. The calculation is done per grid cell. The (vertical) area that should be averaged is configurable. This area can contain more water layers, partial water layers, or a single (partial) layer. If the averaging area contains a partial layer, the weight of that water layer is only the part that is included in the calculation. If the averaging area start and end are the same the transformation simply extracts the temperature of one layer from the time series array. The area of the calculation can be counted from a standard point of comparison (0 m) or the current water level, which changes in time. Input waterLevelReference is optional. If	https://publicwiki.deltares.nl/display/FEWS/DOC/Vertical+Average+Grid+Z+layer	<pre>(code=xml) <?transformationModule version="1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.wideff.nl/FEWS" xsi:schemaLocation="http://www.wideff.nl/FEWS http://www.wideff.nl/schemas/version1.0/transformableModule.xsd"> <variable> <variable>input</variable> <timeSeriesSet> <moduleInstance>StatisticsVerticalAverageGridZLayerFunctionTest</moduleInstance> <valueType>grid</valueType> <parameterName>parameter</parameterName> <locationId>ZLayerAverageLocationSet</locationId> <timeSeriesType>external historical</timeSeriesType> <timeStep unit="day"> <relativeViewPeriod unit="day" start="0" end="3"> <readWriteMode>add original</readWriteMode> </timeSeriesSet> </variable> <variable> <variable>waterLevelReference</variable> <timeSeriesSet> <moduleInstance>StatisticsVerticalAverageGridZLayerFunctionTest2</moduleInstance> <valueType>grid</valueType> <parameterName>waterLevel</parameterName> <locationId>ZLayerAverage_0</locationId> <timeSeriesType>external historical</timeSeriesType> <timeStep unit="day"> <relativeViewPeriod unit="day" start="0" end="3"> <readWriteMode>add original</readWriteMode> </timeSeriesSet> </variable> <variable> <variable>output</variable> <timeSeriesSet> <moduleInstance>StatisticsVerticalAverageGridZLayerFunctionTest2</moduleInstance> <valueType>grid</valueType> </pre>	
Plugin - Module - Transformation	FEWS-23619	FEWS 2020.01, FEWS 2021.01	FEWS-23777 Transformation Module - Vertical interpolation/averaging for scalar (sigma layers)					
System	FEWS-24412	FEWS 2021.01	FEWS-21828 Roadmap: Remove unused modules and displays from FEWS code	Roadmap 2021: Code Clean-up	Roadmap 2021: Code Clean-up. Under the hood moved code to separate libraries for easy removal in a later stage.	https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+End+of+Life+Modules+and+Displays		
System	FEWS-24414	FEWS 2021.01	FEWS-21828 Roadmap: Move code from FEWS main to FEWS_Obsolete.jar	Roadmap 2021: Code Clean-up.	Roadmap 2021: Code Clean-up. Under the hood moved code to separate libraries for easy removal in a later stage.	https://publicwiki.deltares.nl/display/FEWS/DOC/Delft-FEWS+End+of+Life+Modules+and+Displays		
System - FEWS webservices	FEWS-24218	FEWS 2021.01	FEWSWebservices should provide parent locations of children					
System - FEWS webservices	FEWS-19940	FEWS 2021.01	FEWS-22250 PI Service: retrieve data for a certain X,Y,Z coordinate and datalayer	PI REST Service now supports requesting the time series of a grid for 3D data.	PI REST Service now supports requesting the time series of a grid for 3D data. Also a vertical profile can be requested.	https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+PI+REST+Web+Service+FEWSPIRESTWebService-GETtimeseries/grid(2018.02)		

Delft-FEWS 2021.01 New Features								
Component/s	Key	Fix Version/s	Summary	Release Note Text	Release Note Text Description	Link to Documentation	Configuration Example	Images
System - FEWS webservices - PI REST	FEWS-23902	FEWS 2019.02, FEWS 2021.01	ZZL: toevoegen van limit symbols in de FEWSWebServices (read)	detection attribute added to time series and samples	The detection attribute (also known as a limit symbol) has been added to time series and samples responses.	https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+PI+REST+Web+Service#FEWSPIRESTWebService-GETtimeseries	<pre>(code)java <table> <row parameterId="Pilot" qualifierId="CD_19" qualifierId2="QU_27" qualifierId3="UE_27" # age="0" value="3.58" detection="8&#215;" unit="mg/l"/> <row parameterId="Pilot" qualifierId="CD_19" qualifierId2="QU_27" qualifierId3="UE_34" # age="0" value="0.11" detection="8&#215;" unit="mg/l"/></table> (code)</pre>	
System - FEWS webservices - SSD	FEWS-24488	FEWS 2020.02, FEWS 2021.01	SSD Service - default TIMEZERO for getAction request	A minor improvement of the SSD webservice, the way default time is set	A minor improvement of the SSD webservice, the way default time is set	https://publicwiki.deltares.nl/x/OwXkC		
System - FEWS webservices - SSD	FEWS-24489	FEWS 2020.02, FEWS 2021.01	SSD Service - No supported click actions defined	A minor improvement of the SSD webservice, the way clickable objects are rendered in SVG	A minor improvement of the SSD webservice, the way clickable objects are rendered in SVG	https://publicwiki.deltares.nl/x/OwXkC		
System - FEWS webservices - WMS	FEWS-23913	FEWS 2021.01	FEWS-22250 WMS Service - retrieve most recent external forecast from external storage when externalForecastTime is omitted	Latest forecast can now be retrieved from the archive	If a request is done to the WMS and the request doesn't specify an external forecast time then the system will look into the archive to find the latest forecast. If the forecast is never then the forecast in the database then the forecast from the archive will be used.	https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+Web+Services		
System - FEWS webservices - WMS	FEWS-23921	FEWS 2021.01	FEWS-22250 WMS Service - Support default time in getCapabilites	get capabilities now reports a default time	get capabilities now reports a default time and time is no longer required for GetMap.	https://publicwiki.deltares.nl/pages/viewpage.action?pageId=134482048#FEWSWebMappingServicewithtimesupport(WMS-T)-GetCapabilitesdefaulttime(2021.01)		
System - FEWS webservices - WMS	FEWS-24147	FEWS 2021.01	track layer spatial display in webservice	Tracklayers now available in WMS service	Tracklayers now available in WMS service	https://publicwiki.deltares.nl/display/FEWS/DOC/FEWS+Web+Services		
System - Logging	FEWS-24308	FEWS 2021.01	FEWS-24400 Enable logging to stdout (if in docker mode)	log to console enabled for web services and admin interface	log to console enabled for web services and admin interface	https://publicwiki.deltares.nl/display/FEWS/DOC/09+Logging		
System - Workflow	FEWS-24191	FEWS 2021.01	Allow loopLocationSet in workflow to be empty	The loop location set in workflows is now allowed to be empty	A location set is sometimes empty when based on constraints. The location set is added in this case to anticipate on locations that are added in the future.			
Water Coach	FEWS-24573	FEWS 2019.02 EA, FEWS 2021.01	WaterCoach - empty database table "WaterCoach" in scenario database	Remove information concerning the WaterCoach session from the SSD	The scenario/script database should not contain any information concerning the WaterCoach session. This information (selected scenario, script and time) is stored in the localDataStore whenever we start a session. It makes possible to leave an uncompleted session and start it again to continue. When we decide to copy localDataStore to the scenario/script database folder, we should first remove the session info. This can be done with the Explorer F12 menu P database -> delete WaterCoach session info	https://publicwiki.deltares.nl/pages/viewpage.action?pageId=17661956#ScenarioandScriptDatabase(SSD)-RemoveinformationconcerningtheWaterCoachsessionfromtheSSD		
Water Coach	FEWS-24041	FEWS 2021.01, FEWS 2020.02 RWS	WaterCoach - move grid data in the datastore to readonly gbin file on a network drive	Move grid data from local datastore to GBIN file.	To reduce the size of local data store copies dramatically the grid data in a local data store (LDS) can now be moved to separate GBIN file and shared by the copies and the original LDS. Because a GBIN is read-only new grid data is always written to the LDS. When a new GBIN file is created it will also include grid data from an existing GBIN file if necessary. The GBIN file can be located on a network share or on a http(s) file server (e.g. THREDDS). This feature is used by the watercoach but can also be used in stand alone system.	https://publicwiki.deltares.nl/display/FEWS/DOC/Application+configuration		