

SWARCO

# Product Release Notes

OMNIA 4.4 Ver.1



## Revisions History

Date	Version	Status	Index	Revision History	Author / Reviser
11/06/2025	1.0	PREL	A0	First issue	Marzia Selmo

## APPROVAL FOR SUBMISSION

Author signature		Approver signature	
Name		Name	
Title	Project Manager	Title	Project Manager

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## 1 SCOPE OF THE DOCUMENT

This document describes the software release of OMNIA 4.4 including the following:

- Release 4.4 – New Features/Enhancements relating to the following domains:
  - Electronic Signs
  - Event/Incident Management
  - Monitoring
  - Reporting
  - Strategy Management
  - User Management
  - Workflow Management
  - Architectural Developments
  - Tunnel Management
- Change Log Omnia software 4.4 relating to:
  - Features
  - Fixed
  - Known Issues

## 2 RELEASE NOTES OMNIA 4.4

### 2.1 NEW FEATURES/ENHANCEMENTS

The following new or enhanced features are available Omnia release 4.4

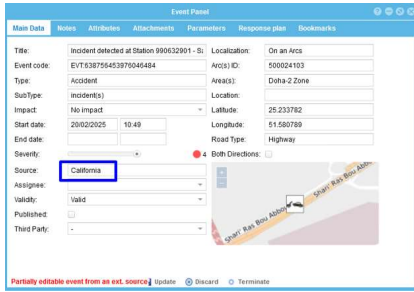
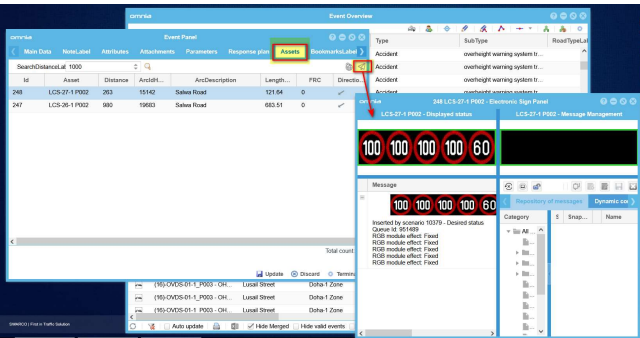
### 2.1.1 Electronic Signs

The following are main features provided in Omnia 4.4 version relating to Electronic Signs domain:

Domain	Feature
Electronic Signs C1233-4073	Enhancement:  (Electronic Sign Panel – <a href="#">Diversion Scenarios</a> ) - The system is able to activate, based on the requests of the strategy manager, scenarios for the variable message panels that have been configured as "diversion scenarios". The diversion scenario is a very normal scenario towards the panels, but has as attributes the characteristics of the diversion that you want to implement, therefore the percentages of traffic attribution to the various corridors where the diversion is done (for example, if there is an accident on corridor 1, and the messages say to use corridor 2 and corridor 3 instead of corridor 1, the percentages could be corr1 20%, corr2 40%, corr3 40%). This information is only necessary for the simulation of the scenarios. Furthermore, the engine, when it activates one of these scenarios, also triggers a diversion type event on the system.
Electronic Signs TCDEV01-59	Enhancement:  (Electronic Signs – <a href="#">Automatic Signs blanking</a> ) – Electronic Signs performance has been improved adopting rules for blanking the signs:  <ul style="list-style-type: none"> <li>- information message mode <ul style="list-style-type: none"> <li>o in case of one of the display is not properly working, the system will not blank the other display</li> </ul> </li> <li>- lane control <ul style="list-style-type: none"> <li>o in case one of the display is not working properly, all the sign of the gantry will be blanked</li> </ul> </li> </ul>
Electronic Signs TCDEV01-236	Enhancement:  (Mobile Electronic Signs – <a href="#">multiple devices assignment to a vehicle</a> ) - The feature allows the user to assign to a vehicle multiple devices. The device can be moved from one vehicle to another. It is possible to maintain the history of the association between a vehicle and a device. When the vehicle is moving, also the attached device will update its position, that will be reflected on the map. When the vehicle is off, it will maintain the last known position until new data are coming for the same vehicle. When the map is on historical mode, the device position will be displayed at the position that the device had before. The icon of the device linked to the vehicle can be customised.
Electronic Signs TCDEV01-447	Enhancement:  (Electronic Signs – <a href="#">Text Alignment management</a> ) – The external OPCUA client now can align - as desired - the text of a message coming from the message library; before, this operation was not allowed. The service OPCUA that allow to send free text messages to Electronics Signs has been modified in order to allow the user to align the text rows by left/right/centre.

## 2.1.2 Event Management

The following are main features relating to Event Management domain:

Domain	Feature
Event Management C1233-4230	<p>Enhancement:</p> <p>(Incident Detection – <b>AID algorithm</b>) - this function implements the capability of the system of detecting roadway incidents using the Vehicle Detector data through the implementation of Automatic Incident Detection algorithms. The system is able to detect an incident starting from the analysis of the average occupancy detected on two consecutive measurement stations. AID subsystem can be disabled by editing the configuration of the service.</p> <p>If properly configured, the event will display the detection source “California” in the related field.</p> 
Event Management C1233-4283	<p>Enhancement:</p> <p>(Event Panel – <b>Asset Tab</b>) – A new tab called “Assets” has been added to Event Panel to display the top 10 closest devices DMS/LCS along the upstream corridor in the pre-set radius.</p> <p>The User can select one of the available devices and open the Electronic Sign Panel for this device directly from this tab.</p> 

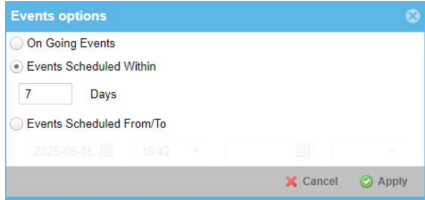
Domain	Feature																																														
Event Management C1233-4082	<p>Enhancement:</p> <p>(Custom Event Report ) – The user can generate custom Event Reports having a different format that respects the company standards, like for example: Some little changes have been applied to Event Report:</p> <ul style="list-style-type: none"><li>- Customized logo</li><li>- Configurable disclaimer</li><li>- Different number of columns</li><li>- Customized section that displays the 5 major incidents (top 5 event selection criteria)</li></ul> <div><div><div>■ Accident</div><div>■ Congestion</div><div>■ Failure</div><div>■ Moving hazards</div><div>■ Obstruction Hazards</div><div>■ Road works</div><div>■ Weather Incident</div></div><table><thead><tr><th>Type</th><th>nEvents</th></tr></thead><tbody><tr><td>Accident</td><td>17</td></tr><tr><td>Congestion</td><td>16</td></tr><tr><td>Failure</td><td>155</td></tr><tr><td>Moving hazards</td><td>450</td></tr><tr><td>Obstruction Hazards</td><td>529</td></tr><tr><td>Road works</td><td>22</td></tr><tr><td>Weather Incident</td><td>37</td></tr></tbody></table><div><p>Major incidents</p><table><thead><tr><th>Location</th><th>EventID</th><th>Start</th><th>End</th><th>Duration</th></tr></thead><tbody><tr><td>22 February Street</td><td>EVT:638718050074654275</td><td>07/01/2025 00:02</td><td></td><td>2470</td></tr><tr><td></td><td>EVT:638718049744774464</td><td>07/01/2025 00:02</td><td></td><td>2470</td></tr><tr><td></td><td>EVT:638718049879577790</td><td>07/01/2025 00:02</td><td></td><td>2470</td></tr><tr><td>Al Furousiya Road</td><td>EVT:638718050132059162</td><td>07/01/2025 00:03</td><td></td><td>2469</td></tr><tr><td></td><td>EVT:638718051031048966</td><td>07/01/2025 00:04</td><td></td><td>2468</td></tr></tbody></table></div></div>	Type	nEvents	Accident	17	Congestion	16	Failure	155	Moving hazards	450	Obstruction Hazards	529	Road works	22	Weather Incident	37	Location	EventID	Start	End	Duration	22 February Street	EVT:638718050074654275	07/01/2025 00:02		2470		EVT:638718049744774464	07/01/2025 00:02		2470		EVT:638718049879577790	07/01/2025 00:02		2470	Al Furousiya Road	EVT:638718050132059162	07/01/2025 00:03		2469		EVT:638718051031048966	07/01/2025 00:04		2468
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Event Management C1233-4195	<p>Enhancement:</p> <p>(Custom Event Report – <b>Automatic generation</b>) – The user is able to set the automatic generation for the customized Event Report for the created and closed events (having Type/Subtype/Severity properly configured only), automatically generated in the FTP folder configurable at system level.</p> <p>The report includes (zip) Doc file and the attachments to the event if present (snapshots, videos).</p>																																														
Event Management C1233-4106	<p>Enhancement:</p> <p>(Event Management – <b>Components integration</b>) – The software integration between Incident Management Tool, Event Panel and Workflow Process provides the user with a proposal (created by the system directly) for lane closure on specific LCS panel on specific modules.</p> <p>If the proposal is accepted by the user, the specific LCS configuration is activated for the event.</p> <p>Incident Management Tool becomes directly accessible from Event Panel and Workflow tools.</p> <p>In case the proposal is not ready yet or the system is not able to create it, the user will be informed with proper messages. In this case the user will be led to edit manually the lane closure directly in the Incident Management tool window.</p>																																														

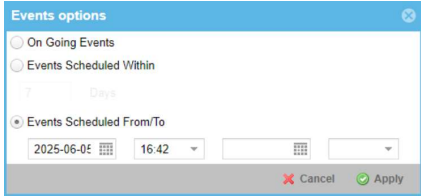


Domain	Feature
Event Management TCDEV01-352	Enhancement: (Event Management – <a href="#">Road Type and Impact field</a> ) – In the Event Panel main tab, two new fields are available to be displayed (if properly configured): "Road Type" and "Impact".

### 2.1.3 Monitoring

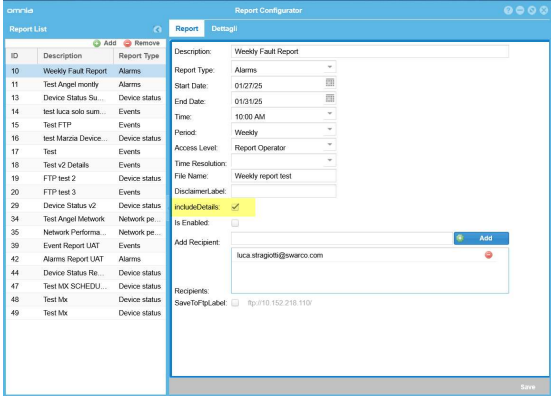
The following are main features relating to Monitoring domain:

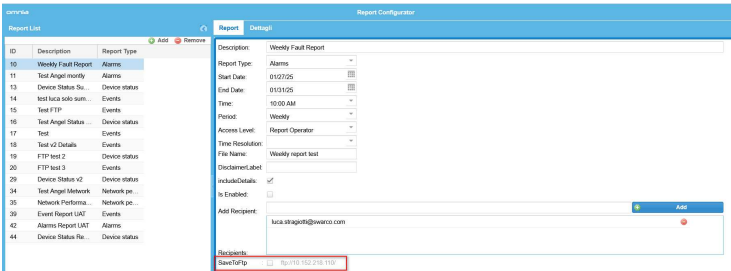
Domain	Feature
Monitoring C1233-3997	Enhancement:  (Vehicle Tracking – <a href="#">Travel Time calculation</a> ) – The system will provide the user with the following capabilities: <ul style="list-style-type: none"> <li>- to display travel time calculated on the path defined between LPR devices</li> <li>- to define the path between LPR (logical nodes)</li> <li>- to calculate the speed for this paths.</li> <li>- to see the encrypted LPR data stored in the database.</li> </ul>
Monitoring C1233-3409	Enhancement:  (Traffic Monitoring – <a href="#">Measurement Extension</a> ) – If Optima is installed on the system, the service has been improved for filtering data not plausible that cannot be sent to the model itself. The engine will check for every measure received if the measure (speed, flow, occupancy) is plausible or not, or if a consecutive set of zeros has been received exceeding a threshold (parameter to be configured). Another case of not plausibility is the unavailability of data: measures is not received (GAP) in the last X minutes (X configurable).
Monitoring TCDEV01-353	Enhancement:  (Map View – <a href="#">Planned Events filter on the map</a> ) – The User can filter planned events to display on the map by choosing between: <ul style="list-style-type: none"> <li>- Ongoing Events</li> <li>- Events scheduled within:</li> </ul> 

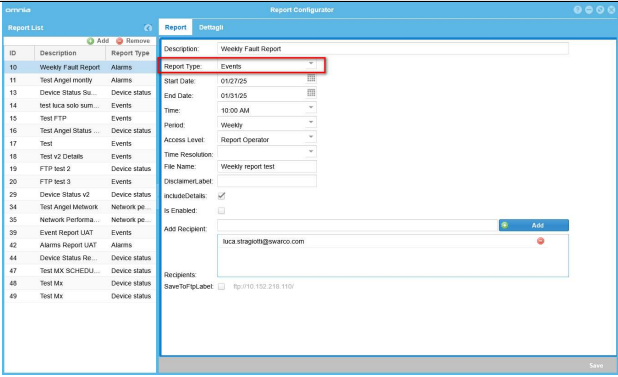
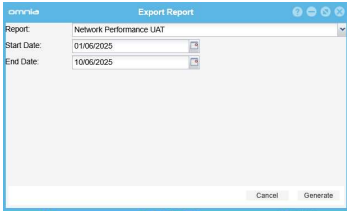

Domain	Feature
	<ul style="list-style-type: none"> <li>- Events scheduled From/To</li> </ul> 

#### 2.1.4 Reporting

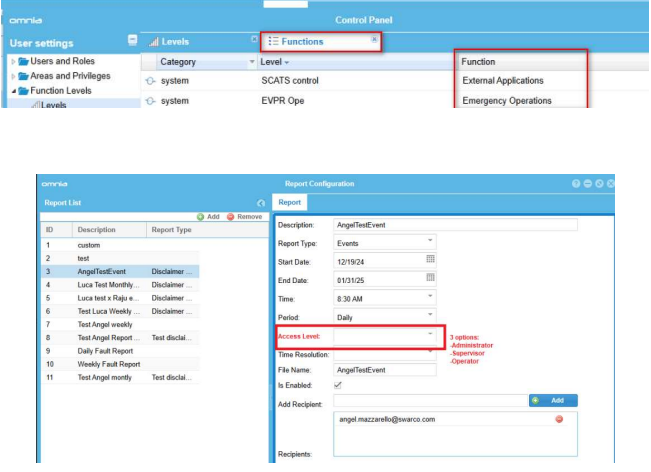
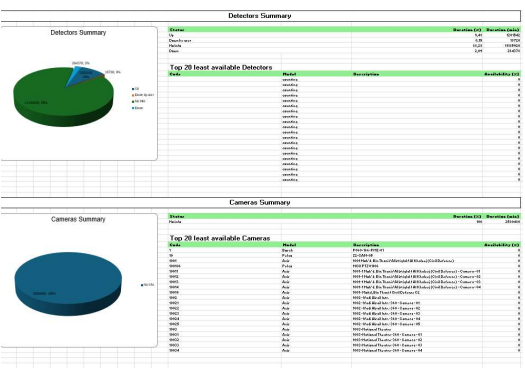
The following are main features relating to Reporting domain:

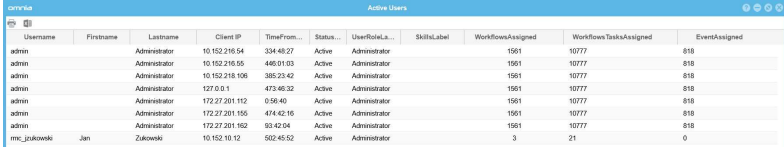
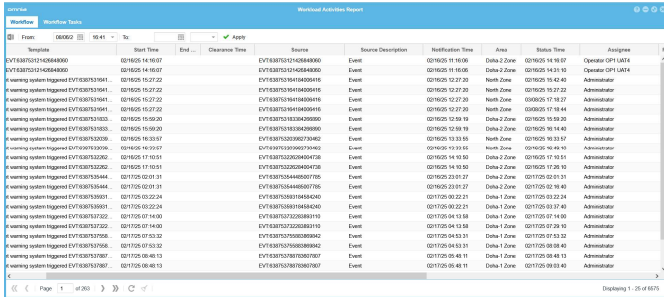
Domain	Feature
Reporting C1233-4208	<p>Enhancement:</p> <p>(Report Configurator – <a href="#">Summary Level</a>) – In the Report Configurator application, the user is able to create a report with the summary level only (default) or, alternatively create a report including both summary and detailed level, by checking the preferred option, depending on his needs. In the Configurator Report tool the user can create more instances of the same report type that will be displayed in the list box in the “Export Report” application.</p> 
Reporting C1233-4093	<p>New:</p> <p>(Report Configurator – Device Alarms) – This is a new Report Type available in the Report Configurator tool. The user will be able to:</p> <ul style="list-style-type: none"> <li>- generate a "Daily Alarms Report" including all the ITS devices faults with Start Time in the day before.</li> </ul>

Domain	Feature
	<ul style="list-style-type: none"> <li>- generate a "Weekly Alarms Report" including all the ITS devices faults with Start Time in the week before.</li> <li>- generate a "Monthly Alarms Report" including all the ITS devices faults with Start Time in the month before.</li> </ul> <p>The report will be provided for the following assets: Controllers, Detection Units, Detectors, CCTV, VBIID, DMS, LCS, Environment Sensors, Tunnel; the report will be available in the "Reports Configurator" application.</p>
Reporting C1233-3986	<p>New:</p> <p>(Report Configurator – <a href="#">FTP folder managed as recipient</a>) – In the Report Configurator application, the user will be able to select FTP folder as "recipient" for the report generation in Report Configurator tool.</p> <p>When this option will be selected, the report will be automatically generated in the related folder accordingly to the configured generation time and period.</p> <p>The report is exactly the same generated by email, including the formatting and the contents, the specified columns, the logo, the disclaimer etc.</p> <p>Note: FTP recipient folder can be configured from database only.</p> 
Reporting C1233-3973	<p>New:</p> <p>(Report Configurator – <a href="#">Periodic Event Report</a>) – In the Report Configurator application the user to generate the new customized "Periodic Event Report" by selecting "Events" from "Report Type" drop down menu and selecting the desired period in the form. It is possible to save different "version" of the same report type. It will be possible to configure also the following parameters:</p> <ul style="list-style-type: none"> <li>- Start/End Date/Time</li> <li>- Access Level (Operator/Admin/Supervisor/...)</li> <li>- Resolution Time</li> <li>- Disclaimer</li> <li>- And other parameters, including Recipients or (FTP as recipient)</li> </ul>

Domain	Feature
	
Reporting C1233-4214	<p>New:</p> <p>(Export Report – <a href="#">Network Performance</a>) – Network Performances is a new Report Type available in the Report Configurator tool, displayed in the Export Report application. The user will be able to generate the report about the Network traffic state.</p> 
Reporting C1233-4088	<p>New:</p> <p>(Export Report – <a href="#">User Permission Management</a>) – In the Export Report application, the user will be able to display only reports for which he has permission for accessing. If he doesn't have permission to see/generate reports, he will not see them in the list box provided by the tool.</p>  <p>Access Levels can be configured in the Report Configuration application; the access level will be associated to a specific function in the "Control Panel" application.</p>

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Domain	Feature
	
Reporting C1233-4207	<p><b>New:</b></p> <p>(Export Report – <b>Device Status Report</b>) – “Device Status Report” is a new Report Type available in the Report Configurator tool. It will be displayed in the Export Report tool and can be generated more instances of the same report type.</p> <p>In the Summary, a set of pie charts show the average daily availability for every type of devices. The list of status for the device is included in the 3rd sheet. The expected result is a union of the different tabs of Status Report for the day before the generation of the report</p> 
Reporting C1233-4197	<p><b>Enhancement:</b></p> <p>(Active User Report – <b>Resources' availability columns</b>) – New columns have been added to the Active User report in order to provide information about resources' availability:</p>

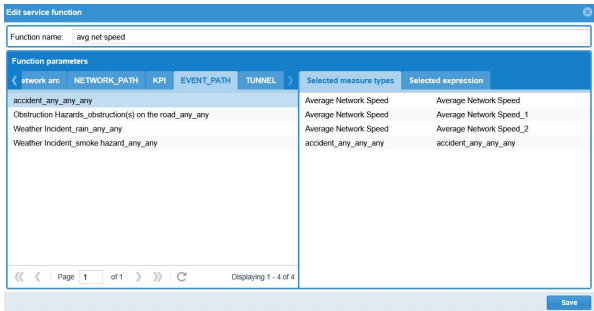
Domain	Feature
	<ul style="list-style-type: none"> <li>- "workflows assigned" to the active user (counter),</li> <li>- "workflow tasks assigned" assigned to the user (counter),</li> <li>- "events assigned" to that specific user (the user is the owner)</li> </ul> 
Reporting C1233-4091	<p>New:</p> <p>(Report – <a href="#">Workload Activities Report</a>) – The user is provided with the possibility to access and generate a new Report that displays the following:</p> <ul style="list-style-type: none"> <li>- the current workflow activities for a single/group of operators in real time (Workflows and Workflow tasks)</li> <li>- the recent workload activities for a single/group of operators</li> </ul> <p>The user will be able to:</p> <ul style="list-style-type: none"> <li>- to filter the time period (From - To) to select the workload activities</li> <li>- to filter the columns and change the order of the columns</li> <li>- to export report in excel format</li> </ul> 

## 2.1.5 Strategy Management

The following are main features relating to Strategy Management domain:

Domain	Feature
Strategy Management C1233-4111	<p>Enhancement:</p> <p>(Services Designer – <a href="#">Edit Service Event Path</a>) – Considering the fact that multiple events can be present on the same path, the service level evaluation function checks</p>

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 C.C.I.A.A. Torino 606099 – C.F. e P.I. IT03972050011  
 Direzione e coordinamento: SWARCO AG

	<p>for all the events which is the corresponding service level, then selects the one with the highest priority. The user can edit the new tab "Event Path" in the Services Designer Tool in order to configure an event as trigger for the strategy in the Strategy Manager.</p> 
Strategy Management TCDEV01-462	<p>Enhancement:</p> <p>(Strategy Manager – <a href="#">Action Points displayed when strategy is selected</a>) – When the user selects a strategy, the system loads the Action Sets of that strategy. The system automatically selects an Action Set, in order to display the related ActionPoints.</p>
Strategy Management TCDEV01-461	<p>Enhancement:</p> <p>(Strategy Manager – <a href="#">Action Set duplication in the same strategy</a>) – The user is provided with the ability to duplicate an Action Set related to the selected Strategy; the new Action Set contains the copy of the Action Point configurations of the original Action Set. The user can modify the Action Points of the new Action Set without modifying those of the original.</p>
Strategy Management TCDEV01-226	<p>Enhancement:</p> <p>(Traffic Network data – <a href="#">Simulation results import from Optima</a>) – A model simulation results will be used to provide traffic performance information to the final user, also for the forecasted time period.</p>
Strategy Management C1233-4337	<p>Enhancement:</p> <p>(Strategy Manager – <a href="#">Strategy data form</a>) – The software has been enhanced in order to allow to access the strategy details form without stopping the strategy as requested before of this modification.</p>
Strategy Management C1233-3521	<p>Enhancement:</p> <p>(Strategy Manager – <a href="#">History log</a>) – The system will log in database the following:</p> <ul style="list-style-type: none"> <li>- every update regarding the strategy status, including the "proposed" service level status</li> <li>- every change in the strategy control points and the measure values that are used to calculate then the control set service level, linking the values to the control set using a command Instance field</li> </ul>

	<ul style="list-style-type: none"> <li>- every change of control set service levels and strategy service level, including the Start time of the new service level and the end time when a different service level is met</li> <li>- every activation of the strategy, means every time and change of the commands; it is possible to have multiple activations for the same strategy for different Control set status instances, being each instance a potentially different service levels.</li> </ul>
Strategy Management C1233-1296	<p>Enhancement:</p> <p>(Strategy Manager – <a href="#">Situation Message generation when Service Level changes</a>) – When a Strategy Service Level is changed (automatically for automatic strategies, after user confirmation for semi-automatic strategies) a Situation Message must be created. The situation message will include the following mandatory parameters:</p> <ul style="list-style-type: none"> <li>- The type of the sender (engine, functionality, external, operator...)</li> <li>- Identifier of the sender (configurable enumeration)</li> <li>- Timestamp of the message</li> <li>- Subtype of notification, required to select the proper template. For example: Event, Fault, DMS message change, ...</li> <li>- Key-value list of parameters, to be used by the notification engine to substitute placeholders. The is not a list of parameters, but it is fully configurable.</li> </ul> <p>And some optional parameters:</p> <ul style="list-style-type: none"> <li>- Area Id of Omnia affected by the "situation message"</li> <li>- The type of object affected by the "situation message"</li> <li>- The object identifier of the object affected by the "situation message"</li> <li>- Icon to be used in the notification</li> </ul>

## 2.1.6 User Management

The following are main features relating to User Management domain:

Domain	Feature
User Management C1233-4233	<p>Enhancement:</p> <p>(User settings – <a href="#">Temporary user rights elevation</a>) – the new feature provides the user with the following possibilities:</p> <ul style="list-style-type: none"> <li>- User can ask for changing system rights for himself (fixed drop down on his own user)</li> <li>- User can ask for changing system rights for another user - (OPTIONAL)</li> <li>- Supervisor is notified about the user request and can reject or accept by modifying rights temporary.</li> </ul> <p>Acceptance or rejection on behalf of Supervisor are managed in the following way:</p> <ul style="list-style-type: none"> <li>✓ management of acceptance by silent consented after timeout</li> </ul>



✓ management of automatic rejection after timeout (OPTIONAL)

The screenshot shows a 'User Rights Elevation' window with a table of permissions. Below it is a 'SummaryWindow Title' dialog box.

Zone	TRAFFICCONT...	TRAFFICCONT...	CCTV	CCTV_expTime	VMS	VMS_expTime	ENVIRONMENT	ENVIRONMENT...	GREEN_STRE...	GREEN_STRE...	NETWORKS	NETWORKS_...
Doha-1 Zone	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	not available	System Operator	System Operator	System Operator
Doha-2 Zone	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	not available	System Operator	System Operator	System Operator
Doha-3 Zone	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	not available	System Operator	System Operator	System Operator
North Zone	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	not available	System Operator	System Operator	System Operator
South Zone	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	System Operator	not available	System Operator	System Operator	System Operator

Area Name	Permission Name	Expiration Time
Doha-1 Zone - TRAFFIC...	System Operator	
Doha-2 Zone - TRAFFIC...	System Supervisor	

Close

Enhancement:

(User settings –[Temporary Asset Management](#)) – The following feature have been implemented:

Feature 1 – Temporary assignment of a device to a different area:

A user with specific permission can assign temporary a device belonging to an area (origin area) to a different area (target area).

All users of the target area are able to see the device in their operation area (selection trees, map, etc).

The "device adding" operation to a different area doesn't require any confirmation.

Moreover, the following notifications have been implemented:

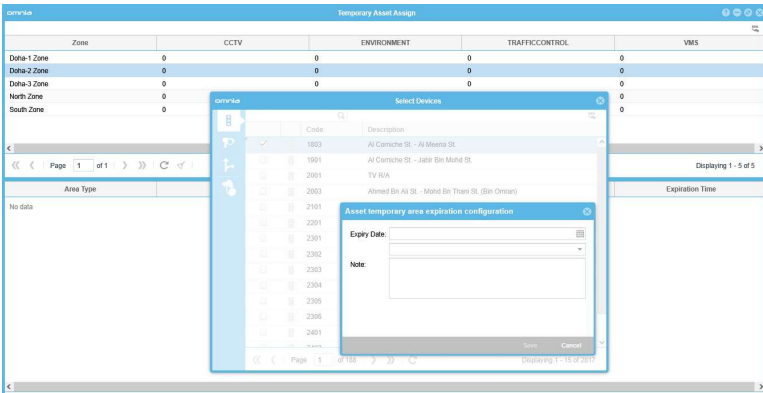
- The users that are in the target area will be notified that a new device is available for control. Notification will include locate and zoom action.
- When the expiration time of the temporary permission is almost over (configurable period), a notification will be sent to users in the target area that the temporary permission is elapsing.
- When the expiration time is over, the users of the target area will be notified, and the permission will be forcibly removed.

Feature 2 – Request temporary permission to access to a specific device in another Operational Area:

A user can ask the permission to temporary access to a device not belonging to areas for which he is authorised. The user when requesting the access will specify the target area to access, selecting from one of the available ones.

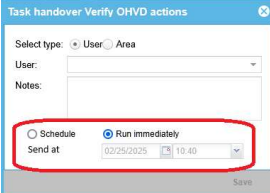
The supervisor can then accept or reject the request. In case of timeout of the response, the request is considered automatically accepted.

User  
Management  
C1233-4314  
C1233-4306

	<p>Expiration time (configurable) is managed and the permission will be forcibly removed when expiration time is over.</p> <p>The requesting users is able to see the device in his operation area (selection trees, map, etc).</p> 
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## 2.1.7 Workflow Management

The following are main features relating to Workflow Management domain:

Domain	Feature
Workflow Management C1233-4051	<p>Enhancement:</p> <p>(Workflow management – <b>Handover/Takeover scheduling</b>) - The system will allow the Supervisor to perform the following actions:</p> <ul style="list-style-type: none"> <li>- Schedule the task/event takeover at a specific Date and Time in future;</li> <li>- Specify range of time (minutes) in the future within which it must be completed the task/event;</li> </ul> <p>Moreover:</p> <ul style="list-style-type: none"> <li>- The system will assign the task/event to the Supervisor in case the scheduled receiver is not available.</li> <li>- The system will alert the Supervisor in case he receive the task/event takeover because the scheduled receiver is not available.</li> </ul> 

## 2.1.8 Architectural developments

Domain	Feature
Architectural Developments C1233-4309	Enhancement:  (API enhancement – <a href="#">Wonderware Adapter – command receiving from Strategy Manager</a> ) – Wonderware adapter, involved in the Tunnel Incident Management process, has been improved in order to receive commands from the Strategy Manager. Tunnels can be added as action points in order to send the activation of tunnel scenarios to Wonderware.
Architectural Developments C1233-4318	Enhancement:  (API enhancement – <a href="#">Wonderware Adapter- command acknowledge management</a> ) – This enhancement implements the management of commands to the tunnel depending on whether the tunnel is centralized or local. If the tunnel is in centralized mode, the command is sent, the feedback that the tunnel gives is read, and based on the feedback (activated, not activated or timeout), a notification is sent to the users. If the tunnel is in local mode, the system still sends the command to the tunnel, but signals OMNIA users that the command cannot be activated because the tunnel is in local mode.
Architectural Developments C1233-4290	Enhancement:  (API enhancement – <a href="#">Wonderware Adapter- notification in case of Tunnel status change</a> ) - Wonderware adapter has been improved in order to provide the notification manager with a situation message when the tunnel status is changing in this range of statuses:  BAU Normal Partial Closure Full Closure
Architectural Developments TCDEV01-249	Enhancement:  (API enhancement – <a href="#">Subsystem Management</a> ) – NTCIP1206 adapter has been improved for filtering and managing devices coming from a single subsystem. The list of subsystems to manage can be specified in the configuration of the specific adapter.
Architectural Developments TCDEV01-222	New:  (API enhancement – <a href="#">PA Vehicles Detection System integration</a> ) – A new adapter has been developed in order to integrate the new type of traffic sensors system in OMNIA. The solution allows the acquisition of the classified counts produced by the sensors, supplied by Project Automation, installed at the city entrance gates for heavy vehicles. The sensors system doesn't provide information on the operating status of the devices or diagnostic alarms; therefore, in the absence of counting data, the adapter <u>assumes</u> that there are no transits. Otherwise, if counting data are present, we assume the sensor is UP. If for a certain number of cycles (configurable) the sensor does not provide counts, it will be declared unavailable in OMNIA. The sensors do not provide information regarding accuracy, therefore the system values it at 100% in the presence of data and at 0% in the absence of data.

**Commented [MS1]:** Questa è la EPIC di riferimento a cui appartiene la STORY successiva; Controllare se vale ancora questa o rimane solo la successiva

Architectural Developments TCDEV01-224	<p>New:</p> <p>(API enhancement – <a href="#">PA Gateway integration</a>) – A new adapter has been developed to implement the following:</p> <ul style="list-style-type: none"> <li>- To allow the operator to read the traffic counts, collected from the PA Detection System</li> <li>- To allow the operator to check the detection units on the Map View</li> <li>- To allow the operator to see if OMNIA is receiving data from the single detection unit. This is represented with the status of the DU: <ul style="list-style-type: none"> <li>o the DU is UP when the adapter receives related traffic data</li> <li>o the DU is NO INFO when the adapter no longer receives</li> </ul> </li> <li>- To allow the System administrator to define the interval of time for acquiring and aggregating data in OMNIA</li> </ul> <p>The operator can see the accuracy with the value 100% whenever the adapter receives data; 0% if the adapter doesn't receive data.</p>
Architectural Developments TCDEV01-360	<p>New:</p> <p>(API enhancement – <a href="#">Tom Tom Real Time Data Feed Adapter</a>) – A new adapter has been developed in order to manage a map matching feature for finding in Mystic network the arcs where to put the data. Data are provided by Tom Tom over segments.</p>
Architectural Developments TCDEV01-438	<p>Enhancement:</p> <p>(Database – <a href="#">SCADA Message filtering</a>) – The software has been improved by introducing a filtering mechanism for incoming SCADA messages. When the system receives a new SCADA message, a check is performed to verify whether a message with identical content (including any relevant metadata) is already present in the queue or currently displayed.</p> <p>If an identical message is already present:</p> <p>→A new record is not inserted into the database and the validity timestamp of the existing record is updated with the timestamp of the new message.</p> <p>If the message is new (i.e., no identical record exists):</p> <p>→A new record is inserted into the database according to the current behaviour.</p>

### 2.1.9 Tunnels Management

Domain	Feature
Tunnels Management C1233-4281	<p>New:</p> <p>(Tunnel – <a href="#">Alarms Acknowledgement</a>) – Every alarm raised by Tunnels in Wonderware, is notified and displayed in Omnia.</p>

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### 3 CHANGE LOG OMNIA 4.4

The following are respectively:

- Features change log
- Fixes Change log
- Known issues Change log

### 3.1 FEATURE CHANGE LOG

The following table contains the list of features included in Omnia 4.4 version.

Story/Epic	Description	Reference key
Story	API enhancement: NTCIP1206 adapter improving for filtering and managing devices coming from a single subsystem.	TCDEV01-249
Story	API enhancement: Tom Tom Real Time Data Feed Adapter improvement	TCDEV01-360
Story	API enhancement: Wonderware Adapter- command acknowledge management	C1233-4318
Story	API enhancement: Wonderware adapter improved for managing API for strategy manager (commands receiving).	C1233-4309
Story	API enhancement: Wonderware adapter to notify in case of tunnel status change	C1233-4290
Story	Database: SCADA Messages Filtering implementation to Avoid Redundant DB Entries	TCDEV01-438
Story	Electronic Signs: automatic sign blanking management	TCDEV01-59
Story	Electronic Signs: diversion Scenario Management	C1233-4073
Story	Event Panel: (enhancement) include Assets tab to present closest devices	C1233-4283
Story	Event Panel: Road Type and Impact fields are customizable in the main tab.	TCDEV01-352
Story	Incident Management: Detection Algorithm implementation to detect incidents	C1233-4230
Story	Map View: Planned Events filtering on the map	TCDEV01-353
Story	Mobile Electronic Signs: multiple devices assignment to a vehicle	TCDEV01-236
Story	Mobile Electronic Signs: Text alignment management	TCDEV01-447
Story	New adapter: PA Gateways integration development	TCDEV01-224
Story	New adapter: PA Vehicles Detection System integration development	TCDEV01-222
Story	Reports: enhancement of "Active Users" omnia window for including workflow/event assignment information	C1233-4197
Story	Reports: Custom Event report can be automatically generated	C1233-4195
Story	Reports: Custom Event Report graphical enhancements implementation.	C1233-4082
Story	Reports: FTP folder to be managed as recipient	C1233-3986
Story	Reports: new Report Type implementation - Device Alarms Report	C1233-4093
Story	Reports: new Report Type implementation - Device Status Report	C1233-4207

Story	Reports: new Report Type implementation - Network Performance Report	C1233-4214
Story	Reports: new Report Type implementation - Workload activities Report	C1233-4091
Story	Reports: Report Configurator application development	C1233-3973
Story	Reports: Report Configurator has to include details option (summary as default).	C1233-4208
Story	Reports: user permissions management for reports implementation	C1233-4088
Story	Simulation: integration between Omnia and Optima	TCDEV01-226
Story	Strategy Manager: Control points list visual order management	TCDEV01-436
Story	Strategy Manager: enhancement to allow to check master data of active strategy without stopping	C1233-4337
Story	Strategy Manager: Generate Situation Message when Service Level is changed	C1233-1296
Story	Strategy Manager: history log management database side for future enhancements	C1233-3521
Story	Strategy Manager: service level triggered by event on path	C1233-4111
Story	Strategy Manager: automatic display of active Action Set when strategy is selected	TCDEV01-462
Story	Strategy Manager: Duplicate Action Set in the same strategy	TCDEV01-461
Story	Systems Integration: Integration between LCS Engine - Event Panel & Workflow Manager to manage closure proposal for user.	C1233-4106
Story	Traffic Monitoring: measurement extension development for managing detector plausibility	C1233-3409
Story	Tunnels: Manage Acknowledge of Tunnel Alarms when received by Wonderware	C1233-4281
Story	User Management: Temporary User Rights elevation implementation	C1233-4233
Story	User settings: devices area temporary assignment	C1233-4314 C1233-4306
Story	Vehicle Tracking: Travel Time calculation from LPR Data and OD matrix information	C1233-3997
Story	Workflow Management: handover/takeover scheduling implementation	C1233-4051

### 3.2 FIX CHANGE LOG

The following table contains the list of fix included in Omnia 4.4 version:

Issue Type	Summary	Issue key
Bug	Signal Group Diagram: Detectors are not visible in the application interface also if they are in Measurement Report	TCDEV01-503
Bug	Map View: TLC icons colour on the map not reflecting the current diagnostic and operative status	TCDEV01-383
Bug	Event Panel: Wrong subtype when subtype is disabled	C1233-4374
Bug	Mistic database maintenance: In production environment was observed that maintenance jobs are cleaning some MISTIC tables	C1233-4378
Bug	Notification Manager: no notification provided for Strategy level change	TCDEV01-487
Bug	VMS Scenarios: not working on Omnia 4.3 with SQL 2016.	TCDEV01-404