

Sample Mapping #	Mapping Type	Topics/Substitutions	API	Template-Source	Target-Payload	Expected Result
51	JSON	<p>publishTopic: evt/outbound/# mappingTopicSample: evt/outbound/berlin_01 filterMapping: bus_event NOTE: for outbound mappings no tt (template topic) is defined. check: Use external id</p> <p>sub: 1. [_IDENTITY.c8ySourceId -> _TOPIC_LEVEL[2]] 2. [type -> eventType] 3. [\$now() -> time] 4. [bus_event -> bus_event] 5. [_IDENTITY.externalId -> deviceId]</p>	E	<pre>{ "type": "c8y_BusEvent", "text": "Bus was stopped", "time": "2022-08-05T00:14:49.389+02:00", "bus_event": "stop_event" }</pre>	<pre>{ "deviceId": "909090", "description": "This is a new test event.", "time": "2022-08-05T00:14:49.389+02:00", "eventType": "TestEvent", "bus_event": "stop_event", "_TOPIC_LEVEL": { "evt", "outbound", "berlin_01" } }</pre>	<p>Publish mqtt msg. with event on topic 'evt/outbound/berlin_01' Use following command to create sample event: c8y events create --device 'YOUR_DEVICE_ID' --data 'bus_event="stop_event", text="Bus was stopped today!", type="c8y_BusEvent"'</p>
52	JSON	<p>publishTopic: opp/outbound/# mappingTopicSample: opp/outbound/berlin_01 filterMapping: bus_opp check: Use external id</p> <p>NOTE: for outbound mappings no tt (template topic) is defined.</p> <p>sub: 1. [_IDENTITY.externalId -> _TOPIC_LEVEL[2]] choose: Resolve to externalId 2. [bus_opp -> description] 3. [* _IDENTITY.c8ySourceId -> c8y_Id]</p>	O	<pre>{ "bus_opp": "New engine restart operation!" }</pre>	<pre>{ "c8y_Id": "909090", "description": "dummy operation", "type": "bus_operation", "_TOPIC_LEVEL": { "opp", "outbound", "berlin_01" } }</pre>	<p>Publish mqtt msg. with operation on topic 'opp/outbound/berlin_01' Use following command to create sample event: c8y operations create --device 'YOUR_DEVICE_ID' --data 'bus_opp="New engine restart operation!"' Note: The option "resolve2ExternalId = false" ensures that the C8Y internal device id is used in substitution 3.</p>
53	JSON	<p>publishTopic: evt/outDeviceId/# mappingTopicSample: evt/outDeviceId/berlin_01 filterMapping: bus_event NOTE: for outbound mappings no tt (template topic) is defined. check: Use external id</p> <p>sub: 1. [_IDENTITY.externalId -> _TOPIC_LEVEL[2]] 2. [type -> eventType] 3. [\$now() -> time] 4. [bus_event -> bus_event] 5. [_IDENTITY.c8ySourceId -> c8y_Id] 6. [text -> description]</p>	E	<pre>{ "type": "c8y_BusEvent", "text": "Bus was stopped", "time": "2022-08-05T00:14:49.389+02:00", "bus_event": "stop_event" }</pre>	<pre>{ "c8y_Id": "909090", "description": "This is a new test event.", "time": "2022-08-05T00:14:49.389+02:00", "eventType": "TestEvent", "bus_event": "stop_event", "_TOPIC_LEVEL": { "evt", "outbound", "berlin_01" } }</pre>	<p>Publish mqtt msg. with event on topic 'evt/outbound/berlin_01' Use following command to create sample event: c8y events create --device 'YOUR_DEVICE_ID' --data 'bus_event="stop_event", text="Bus was stopped today!", type="c8y_BusEvent"'</p>
54	JSON	<p>publishTopic: ednvcfnr-event mappingTopicSample: ednvcfnr-event filterMapping: bus_event NOTE: for outbound mappings no tt (template topic) is defined. check: Use external id check: Use message context</p> <p>sub: 1. [_IDENTITY.externalId -> _CONTEXT_DATA.key] 2. [type -> eventType] 3. [\$now() -> time] 4. [bus_event -> bus_event] 5. [_IDENTITY.externalId -> deviceId]</p>	E	<pre>{ "type": "c8y_BusEvent", "text": "Bus was stopped", "time": "2022-08-05T00:14:49.389+02:00", "bus_event": "stop_event" }</pre>	<pre>{ "deviceId": "909090", "description": "This is a new test event.", "time": "2022-08-05T00:14:49.389+02:00", "eventType": "TestEvent", "bus_event": "stop_event", "_TOPIC_LEVEL": { "evt", "outbound", "berlin_01" } }</pre>	<p>Publish msg. to kafka with event on topic 'ednvcfnr-event' Use following command to create sample event: c8y events create --device 'YOUR_DEVICE_ID' --data 'bus_event="stop_event", text="Bus was stopped today!", type="c8y_BusEvent"'. The Cumulocity device id is added as key (message context).</p>
55	JSON OUTBOUND check "Define substitutions as JavaScript"	<p>publishTopic: measurement/measurements mappingTopicSample: measurement/measurements filterMapping: c8y_TemperatureMeasurement.T.value > 10 filterInventory: type = "wika_PGW23"</p> <p>sub are defined in the JavaScript code:</p> <pre>//Define temperature fragment mapping temperature -> c8y_Temperature.T.value/unit const temperatureSV = new SubstitutionValue(temperatureFragment, TYPE.OBJECT, RepairStrategy.CREATE_IF_MISSING, false); addSubstitution(result, 'c8y_TemperatureProcessed', temperatureSV);</pre> <p>NOTE: the JavaScript code is included in the samples file mappings-OUTBOUND.json</p>	M	<pre>{ "c8y_TemperatureMeasurement": { "T": { "value": 110, "unit": "C" } }, "time": "2022-08-05T00:14:49.389+02:00", "type": "c8y_TemperatureMeasurement", }</pre>	<pre>{ "Temperature": { "value": 110, "unit": "C" }, "source": { "id": "878275" }, "time": "2022-08-05T00:14:49.389+02:00", "type": "c8y_TemperatureProcessed", "_CONTEXT_DATA": { "key": "key-sample", "method": "POST", "publishTopic": "measurement/measurements" }, "_TOPIC_LEVEL": ["measurement", "measurements"] }</pre>	<p>This outbound mapping listens to c8y_TemperatureMeasurement and creates a new measurement of type c8y_TemperatureProcessed</p>

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56	JSON OUTBOUND check "Define substitutions as JavaScript"	<p>publishTopic: inventory/managedObjects/# mappingTopicSample: inventory/managedObjects/+ filterMapping: type = "c8y_Uplink" filterInventory: type = "wika_PGW23" check: Use message context</p> <p>sub are defined in the JavaScript code:</p> <p>//Define a new Measurement Value for Temperatures by assigning from source const w2a_configuration = { value: 'bsd_' + measurements[0] };</p> <p>// Substitution: String key, Object value, MappingSubstitution.SubstituteValue.TYPE type, RepairStrategy repairStrategy const w2a_configuration_fragment = new SubstitutionValue(w2a_configuration, TYPE.OBJECT, RepairStrategy.CREATE_IF_MISSING, false); addSubstitution(result, 'w2a_configuration', w2a_configuration_fragment);</p> <p>NOTE: the JavaScript code is included in the samples file mappings-OUTBOUND.json</p>	E	<pre>{ "id": "74292", "time": "2025-04-01T23:06:58.794+02:00", "text": "New uplink event: 2025-04-01T23:06:58.794+02:00", "source": { "name": "PDW23 - 102030", "id": "9375325" }, "type": "c8y_Uplink", "bytes": [1, 0, 35, 90, 185, 35, 110], "_IDENTITY_": { "c8ySourceId": "909090" } }</pre>	<pre>{ "_TOPIC_LEVEL_": { "inventory", "managedObjects", "+" }, "_CONTEXT_DATA_": { "key": "key-sample", "method": "POST", "publishTopic": "inventory/managedObjects/#" } }</pre>	<p>This outbound mapping listens to events of type "c8y_Uplink" and extracts data for the fragment w2a_configuration. The inventory of this device is updated. Additionally this update is a merge/ patch of the existing fragment w2a_configuration.</p>