

Location Intelligence
Infrastructure Asset Management

Confirm®

IoT Connector Schema

v26.30a.AM

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October 02, 2026

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Specifications

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IoT Connector XML Schema

Introduction

This document describes the XML schema used to allow an external system or website to update Feature Conditions and check for existing Defects and create new ones, using the Confirm Connector.

The data transfer will be initiated by the external system or website. The Connector will always send data as a reply to the request.

Operation Overview

The Request sent to the Connector contains an “Authentication” section detailing the database connection and Confirm User information, and an “Operation” section detailing the operations to be carried out on that database.

The rest of this document describes briefly each of the operations that might be included in a Request, and the corresponding Response for each.

Where data is provided in a lookup field it must correspond to a valid record in the Confirm database, otherwise a Fault will be returned.

Where subsequent sections refer to a “User” this is the Connector User, i.e. the Login Name the Connector uses in connecting to the Confirm database. This determines which data will be returned where Data Key Security is in place.

XML Schema Definitions

The Request XML is defined in the following schema documents:

- IoT.xsd

The Response XML is defined with the methods in the following section.

Methods

This section describes the Requests to be sent from the external system or website to Confirm, and what the Responses will contain.

FeatureUpdate > FeatureCondition

This operation is used to update Feature Conditions in Confirm. This method does not create history and is designed to be called frequently without storing additional data in Confirm.

A single request can update multiple Features each having multiple Observation Types with a Value specified.

In order to update Feature Condition, either the Observation Grade or Value need to be supplied.

Any validation errors (e.g. the Value not matching the Grade min or max conditions) are returned as a Warnings collection in the response.

Schema validation errors are returned as Connector Fault Responses.

GetDefectsForFeature

Returns the outstanding Defects for a Feature. This is intended to be used by external systems to prevent the creation of duplicate Defects.

Defects matching the following criteria are returned:

- Defects not linked to a Job that have Action Required set on the Defect Status
- Defects linked to a Job where the Actual Completion Date is not set and the Job Status is Outstanding

Schema validation errors are returned as Connector Fault Responses.

GetDefectsForFeature Response

When Outstanding Defects are found for the requested Feature the following information is returned.

Field	Type	Notes
DefectNumber	Decimal	
DefectDate	DateTime	
DefectTypeCode	String	
DefectTypeName	String	
DefectEasting	Decimal	Coordinates are for the defect itself.
DefectNorthing	Decimal	Coordinates are for the defect itself.

FeatureUpdate > FeatureDefect

This operation is used to create Defects in Confirm.

A single request can update multiple Features each having multiple Defects.

Any validation errors are returned as a Warnings collection in the response.

Schema validation errors are returned as Connector Fault Responses.