

XFRACAS 2024 XML Import Business Logic

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Introduction

This document provides information to help you import data into your implementation of ReliaSoft XFRACAS by Hottinger Bruel & Kjaer Inc. It describes the XML elements and attributes in the XML Document Type Definition (DTD) for each type of record you can import or export. It also describes the functions in the XFRACAS web service.

To download a sample application that demonstrates how to use the web service functions, visit <http://help.reliasoft.com/xfracas24/admin/help/content/examples/XfracasImportExample.zip>.

Definitions

XML ELEMENT

Information unit within an XML document consisting of a start tag, an end tag, the value between the tags and any XML attributes.

Example: <ExampleElement></ExampleElement>

ATTRIBUTE

A combination of a name and a value that provides additional information about an XML element.

Example: <ExampleElement exampleAttribute="1"></ExampleElement>

VALUE

XML data located between a start tag and an end tag.

Example: <ExampleElement>ExampleValue</ExampleElement>

REQUIRED ELEMENTS

Elements in orange are required.

Example: <ExampleElement>

Common Elements

EXPORT DATA

- The ExportData element contains information about the export.
- This will be present on all XML files exported from the XFRACAS user interface. **Nothing is imported from this element.**

RESOURCES

- The Resources element contains translations for supported interface languages. It is used for the XSLT-based “Print Preview” feature in the XFRACAS user interface.
- This will be present on most XML files exported from the XFRACAS user interface. **Nothing is imported from this element.**

VALID ENTITY

- The Entity element is required.
 - The EntityID element value or the EntityName value must match an existing entity.
 - The EntityID element is checked first and if no match is found the EntityName element is checked.
- If neither value matches an existing entity, the import will be stopped.

VALID ISSUE

A valid Issue must meet the following requirements:

- The Issue element must contain an IssueTypeID attribute.
- The Issue element must contain a Description element.
- The Code element is optional.
- The Description element must have a value.

A combination of IssueType, Code and Description must match an existing issue. (Only description is required.)

VALID PART

A valid Part must meet the following requirements:

- The PartName or PartNumber element must be present.

- The PartName or PartNumber element must contain a value.

If the combination of PartName, PartNumber and PartVersion match an existing part, then that part will be used. (Either PartName or PartNumber is required.)

VALID USER

- The FirstName, MiddleName, LastName and Login elements can be nested in any element.
- The Login element is required and its value must match an existing user's login.
- The login is typically a "DomainName\Username" but could also be an SSO ID if that is being used.

VALID DATE

- The Day, Month and Year must be a valid date.
- If the Hour, Minute or Second elements contain values, they must be a valid time.
- All Dates should be in UTC or GMT+0 (because all data stored in the database is in UTC).

FormattedDate is for display information on the export only.

Import Configuration

The ImportConfiguration element is used to specify import settings and should be placed below the ExportData or Resources element, if present, and above the first import type element (Incident, Problem, etc). The Import Configurations are optional and, if present, must be “Yes” or “No” (empty is treated as no). The elements below are available on every import type. In addition, Incidents have additional elements specifically for that import.

```
<ImportConfiguration>  
  <BatchInsert></BatchInsert>  
  <SplitTransaction></SplitTransaction>  
  <EnableUpdate></EnableUpdate>  
  <UpdateOnly></UpdateOnly>  
  <InsertDetailIssues></InsertDetailIssues>  
</ImportConfiguration>
```

<BatchInsert>

Determines if the import queries are executed individually or in batches to improve performance. Each batch will contain approximately 1000 queries and by default will be executed in its own transaction. A query batch will contain all the queries to import a number of import types (incident, problem, system, etc). For very large imports (with more than 1000 queries per import type), the batch will be split at 1000 queries and may not contain all the queries to import an import type. *Default value: “No”*

<SplitTransaction>

Determines if insert queries are run in one transaction or split into multiple transactions.

- **Batch:** Each batch of queries will run in its own transaction. This is the default value when BatchInsert is enabled, and is an invalid setting when BatchInsert is not enabled. This setting allows for any batch of queries to fail while still successfully importing the remaining batches. If this setting is enabled and if one type has a failure and another is imported successfully, the imported file and import log will appear in the Error section of the Data Import page.
- **Type:** Each import type (incident, problem, etc) in the file will be run in its own transaction. Not available for batch inserts. This setting is useful when importing a large number of types without batch import enabled, as it prevents an error in one type from rolling back the entire import. If this setting is enabled and if one type has a failure and another is imported successfully, the imported file and import log will appear in the Error section of the Data Import page.
- **NoSplit:** All queries will be run in one transaction even if BatchInsert is enabled or there are multiple import types in one file. This is the default value when BatchInsert is disabled. This setting allows for rolling back the entire import if an error occurs anywhere.
- **Yes:** If BatchInsert is enabled, each batch will be inserted in its own transaction. This setting is invalid if BatchInsert is not enabled.

- **No:** All queries will be run in one transaction, same as the NoSplit setting.

<EnableUpdate>

Sets whether the import can update existing records. *Default value: "No"*

- **No:** If the relevant ID matches an existing record, the record will not be imported and it will be logged as a duplicate in the error log.
- **Yes:** If the relevant ID matches an existing record, certain fields can be updated.

This applies only for incident records. For information on the fields that can be updated, see "[Incident Import Configuration](#)," "[Incident Elements](#)" and "[Details](#)."

<UpdateOnly>

Sets whether the import can insert new values when updating an existing record. *Default value: "No"*

- **No:** The import can modify/delete existing values or add new values.
- **Yes:** The import can modify/delete existing values, but it will not add new values if the field was previously blank.

This applies only for incident records and only if EnableUpdate is "Yes." For information on how this applies for the fields that can be updated, see "[Incident Import Configuration](#)," "[Incident Elements](#)" and "[Details](#)."

<InsertDetailIssues>

Sets whether details containing issues can use only existing issues or if new issues can be inserted if existing ones are not found. *Default value: "No"*

Incidents

INCIDENT IMPORT CONFIGURATION

The following elements are Incident-specific import settings that may be present below the standard ImportConfiguration elements (see “[Import Configuration](#)”).

For each of these, the default value (if applicable) is “Yes,” unless otherwise indicated.

<InsertIncidentIssues>

Sets whether certain issues in the Incident import can be inserted if no existing issue is found; applies to Statuses, Categories, ReportTypes, SystemStatus, RepairReplace PartFailure, RepairReplace PartDisposition and Team Members.

<UpdateTitle>

Determines if the Incident Title can be updated if EnableUpdate is set to “Yes.”

<UpdateCreator>

Determines if the Incident Creator can be updated if EnableUpdate is set to “Yes.”

<UpdateOwner>

Determines if the Incident Owner can be updated if EnableUpdate is set to “Yes.”

<UpdateASPFieldServiceTech>

Determines if the ASP Field Service Tech can be updated if EnableUpdate is set to “Yes.”

<UpdateOccurrenceDate>

Determines if the Occurrence Date can be updated if EnableUpdate is set to “Yes.”

<UpdateServiceResponseDate>

Determines if the Service Response Date can be updated if EnableUpdate is set to “Yes.”

<UpdateClosedDate>

Determines if the Closed Date can be updated if EnableUpdate is set to “Yes.”

<UpdateResponsiblePart>

Determines if Responsible Parts can be updated if EnableUpdate is set to “Yes.”

<UpdateCustomerRequestedFeedback>

Determines if Customer Requested Feedback can be updated if EnableUpdate is set to "Yes."

<UpdateAddress>

Determines if Incident Address can be updated if EnableUpdate is set to "Yes."

<UpdateStatuses>

Determines if Statuses can be updated if EnableUpdate is set to "Yes."

<UpdateCategories>

Determines if Categories can be updated if EnableUpdate is set to "Yes."

<UpdateReportTypes>

Determines if ReportTypes can be updated if EnableUpdate is set to "Yes."

<UpdateSystemStatuses>

Determines if System Statuses can be updated if EnableUpdate is set to "Yes."

<UpdateTeamMembers>

Determines if Team Members can be updated if EnableUpdate is set to "Yes."

<UpdateReportedRunHours>

Determines if Reported Run Hours can be updated if EnableUpdate is set to "Yes."

<UpdateActions>

Determines if Actions can be updated if EnableUpdate is set to "Yes."

<UpdateDetails>

Determines if Details can be updated if EnableUpdate is set to "Yes."

<SendIncidentEmail>

Determines if e-mails can be sent when the import creates new incidents. *Default value: "No"*

- **Yes:** If the "E-mail – Incident Creation" preference in XFRACAS is true, e-mails will be sent to the incident owners (i.e., the same as for new incidents created via the website).
- **No:** Regardless of the preference in XFRACAS, e-mails will not be sent for new incidents created via import.

<IncidentEmailCC>

If SendIncidentEmail is set to "Yes," sets additional recipients for e-mails that are generated when the import creates new incidents. This is optional. If specified, it can be a single e-mail address or multiple addresses separated by commas (e.g., cc1@domain.com, cc2@domain.com).

INCIDENT XML SAMPLE

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Incidents SYSTEM "Incident.dtd"[]>
<Incidents xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ExportData>
    <ReportGenerated>09/14/2013 03:35 PM</ReportGenerated>
    <GeneratedBy>
      <FirstName></FirstName>
      <LastName></LastName>
      <Login></Login>
    </GeneratedBy>
    <GMTOffset>-7</GMTOffset>
  </ExportData>
  <Resources />
  <ImportConfiguration />
  <Incident>
    <IncidentID>TI-1</IncidentID>
    <Title>Test Incident</Title>
    <Entity>
      <EntityID>1</EntityID>
      <EntityName>Test Entity</EntityName>
    </Entity>
    <Creator>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </Creator>
    <Owner>
      <FirstName>Sam</FirstName>
      <LastName>User</LastName>
      <Login>SUSER</Login>
    </Owner>
    <AssignedProblems>
      <ProblemID>PR-1</ProblemID>
    </AssignedProblems>
    <Type>
```

```
<Issue IssueTypeID="20">
  <Description>Serialized Incident</Description>
</Issue>
</Type>
<ASPFieldServiceTech>
  <CustomerID>1</CustomerID>
  <FirstName>Sally</FirstName>
  <LastName>User</LastName>
</ASPFieldServiceTech>
<OccurrenceDate>
  <Year>2013</Year>
  <Month>6</Month>
  <Day>19</Day>
  <Hour>20</Hour>
  <Minute>21</Minute>
  <Second>0</Second>
  <FormattedDate>06/19/2013 01:21 PM</FormattedDate>
</OccurrenceDate>
<CreateDate>
  <Year>2013</Year>
  <Month>6</Month>
  <Day>17</Day>
  <Hour>20</Hour>
  <Minute>21</Minute>
  <Second>51</Second>
  <FormattedDate>06/17/2013 01:21 PM</FormattedDate>
</CreateDate>
<CloseDate />
<ResponseTime>1170</ResponseTime>
<DowntimeForService>1175</DowntimeForService>
<RepairDurationTime>12</RepairDurationTime>
<CustomerSupportNumber>CSI-1</CustomerSupportNumber>
<TopLevelPart>
  <PartID>1</PartID>
  <PartName>XFRACAS</PartName>
  <PartNumber>XFRACAS</PartNumber>
  <PartVersion />
  <RetiredDate />
  <SerialHID>1</SerialHID>
  <SerialNumber>1</SerialNumber>
  <TimeMetric1>17</TimeMetric1>
  <TimeMetric2>245</TimeMetric2>
  <TimeMetric3>2222</TimeMetric3>
```

```

</TopLevelPart>
<ResponsibleParts>
  <ResponsiblePart>
    <Part>
      <PartID>2</PartID>
      <PartName>Action</PartName>
      <PartNumber>Action</PartNumber>
      <PartVersion />
      <RetiredDate />
    </Part>
    <ResponsibleUser />
  </ResponsiblePart>
</ResponsibleParts>
<Chargeable>No</Chargeable>
<UnderWarranty>No</UnderWarranty>
<WarrantyOverride />
<CustomerRequestedFeedback>No</CustomerRequestedFeedback>
<ServiceResponseDate>
  <Year>2013</Year>
  <Month>8</Month>
  <Day>7</Day>
  <Hour>23</Hour>
  <Minute>52</Minute>
  <Second>0</Second>
  <FormattedDate>08/07/2013 04:52 PM</FormattedDate>
</ServiceResponseDate>
<UnitLocation>AGCO</UnitLocation>
<Address>
  <AddressLine1>123 Fake St.</AddressLine1>
  <AddressLine2 />
  <City>Tucson</City>
  <State>Arizona</State>
  <Country>United States</Country>
  <ZipCode>85710</ZipCode>
  <Location>TUS</Location>
</Address>
<Statuses>
  <Status>
    <Issue IssueTypeID="8">
      <Code>10</Code>
      <Description>Under Review</Description>
    </Issue>
    <Date>

```

```

        <Year>2013</Year>
        <Month>7</Month>
        <Day>1</Day>
        <Hour>15</Hour>
        <Minute>49</Minute>
        <Second>34</Second>
        <FormattedDate>07/01/2013 08:49 AM</FormattedDate>
    </Date>
    <UpdatedBy>
        <FirstName>Joe</FirstName>
        <LastName>User</LastName>
        <Login>JUSER</Login>
    </UpdatedBy>
    <Retired>No</Retired>
</Status>
<Status>
    <Issue IssueTypeID="8">
        <Code>01</Code>
        <Description>Open/New</Description>
    </Issue>
    <Date>
        <Year>2013</Year>
        <Month>6</Month>
        <Day>17</Day>
        <Hour>20</Hour>
        <Minute>21</Minute>
        <Second>51</Second>
        <FormattedDate>06/17/2013 01:21 PM</FormattedDate>
    </Date>
    <UpdatedBy>
        <FirstName>Joe </FirstName>
        <LastName>User</LastName>
        <Login>JUSER</Login>
    </UpdatedBy>
    <Retired>Yes</Retired>
</Status>
</Statuses>
<Categories>
    <Category>
        <Issue IssueTypeID="21">
            <Description>Cleanup</Description>
        </Issue>
        <Date>
    
```

UNRESTRICTED

```

        <Year>2013</Year>
        <Month>6</Month>
        <Day>17</Day>
        <Hour>20</Hour>
        <Minute>21</Minute>
        <Second>51</Second>
        <FormattedDate>06/17/2013 01:21 PM</FormattedDate>
    </Date>
    <UpdatedBy>
        <FirstName>Joe</FirstName>
        <LastName>User</LastName>
        <Login>JUSER</Login>
    </UpdatedBy>
    <Retired>No</Retired>
    <Chargeable>No</Chargeable>
</Category>
</Categories>
<SystemStatuses>
    <SystemStatus>
        <Issue IssueTypeID="14">
            <Code>40</Code>
            <Description>Running</Description>
        </Issue>
        <Date>
            <Year>2013</Year>
            <Month>8</Month>
            <Day>2</Day>
            <Hour>15</Hour>
            <Minute>39</Minute>
            <Second>16</Second>
            <FormattedDate>08/02/2013 08:39 AM</FormattedDate>
        </Date>
        <Retired>No</Retired>
    </SystemStatus>
    <SystemStatus>
        <Issue IssueTypeID="14">
            <Code>40</Code>
            <Description>Running</Description>
        </Issue>
        <Date>
            <Year>2013</Year>
            <Month>7</Month>
            <Day>30</Day>
    
```

UNRESTRICTED


```

        <Hour>15</Hour>
        <Minute>6</Minute>
        <Second>59</Second>
        <FormattedDate>07/30/2013 08:06 AM</FormattedDate>
    </Date>
    <Retired>Yes</Retired>
</SystemStatus>
</SystemStatuses>
<ReportTypes>
    <ReportType>
        <Issue IssueTypeID="38">
            <Description>Prerelease or Staging</Description>
        </Issue>
        <Date>
            <Year>2013</Year>
            <Month>6</Month>
            <Day>17</Day>
            <Hour>20</Hour>
            <Minute>21</Minute>
            <Second>51</Second>
            <FormattedDate>06/17/2013 01:21 PM</FormattedDate>
        </Date>
        <UpdatedBy>
            <FirstName>Joe</FirstName>
            <LastName>User</LastName>
            <Login>JUSER</Login>
        </UpdatedBy>
        <Retired>No</Retired>
    </ReportType>
</ReportTypes>
<RepairReplaces>
    <RepairReplace PartOrder="0">
        <OldPart>
            <PartID>1</PartID>
            <PartName>XFRACAS</PartName>
            <PartNumber>XFRACAS</PartNumber>
            <PartVersion />
            <RetiredDate />
            <SerialHID>1</SerialHID>
            <SerialNumber>1</SerialNumber>
        </OldPart>
        <NewPart />
        <FailureAnalyses />
    </RepairReplace>
</RepairReplaces>

```

UNRESTRICTED

```

<PartDisposition />
<RMAReceivedDate />
<ChangeDate>
  <Year>2013</Year>
  <Month>7</Month>
  <Day>30</Day>
  <Hour>15</Hour>
  <Minute>7</Minute>
  <Second>1</Second>
  <FormattedDate>07/30/2013 08:07 AM</FormattedDate>
</ChangeDate>
<StartingAge>0</StartingAge>
<StartingAge2>0</StartingAge2>
<StartingAge3>0</StartingAge3>
<HoursToFailure>17.00</HoursToFailure>
<HoursToFailure2>17.00</HoursToFailure2>
<HoursToFailure3>17.00</HoursToFailure3>
</RepairReplace>
<RepairReplace PartOrder="1">
  <OldPart>
    <PartID>3</PartID>
    <PartName>Action List</PartName>
    <PartNumber>Action List</PartNumber>
    <PartVersion />
    <RetiredDate />
    <SerialHID>2</SerialHID>
  </OldPart>
  <NewPart>
    <PartID>4</PartID>
    <PartName>Action List 2</PartName>
    <PartNumber>Action List 2</PartNumber>
    <PartVersion />
    <RetiredDate />
    <SerialHID>3</SerialHID>
  </NewPart>
  <PartFailure>
    <FailureType>
      <Issue IssueTypeID="23">
        <Description>Collateral Failure</Description>
      </Issue>
    </FailureType>
  </PartFailure>
<FailureAnalyses />

```

```

<PartDisposition>
  <Issue IssueTypeID="13">
    <Code>1</Code>
    <Description>Send to Reman</Description>
  </Issue>
</PartDisposition>
<RMAReceivedDate />
<ChangeDate>
  <Year>2013</Year>
  <Month>7</Month>
  <Day>31</Day>
  <Hour>23</Hour>
  <Minute>2</Minute>
  <Second>44</Second>
  <FormattedDate>07/31/2013 04:02 PM</FormattedDate>
</ChangeDate>
<StartingAge>0</StartingAge>
<StartingAge2>0</StartingAge2>
<StartingAge3>0</StartingAge3>
<HoursToFailure>17.00</HoursToFailure>
<HoursToFailure2>17.00</HoursToFailure2>
<HoursToFailure3>17.00</HoursToFailure3>
</RepairReplace>
</RepairReplaces>
<Criticalities>
  <Criticality>
    <SelectedCriticalityIssue>
      <Issue IssueTypeID="1000">
        <Code>1</Code>
        <Description>Value 1</Description>
      </Issue>
    </SelectedCriticalityIssue>
    <CriticalityType>
      <CritTypeName>Criticality Example</CritTypeName>
      <CritTypeDescription>Criticality Example</CritTypeDescription>
    </CriticalityType>
    <CriticalityStep>1</CriticalityStep>
    <CriticalityDisplayOrder>2</CriticalityDisplayOrder>
  </Criticality>
</Criticalities>
<TeamMembers>
  <TeamMember>
    <MemberUser>

```

```

    <FirstName>Bob</FirstName>
    <LastName>User </LastName>
    <Login>BUSER</Login>
  </MemberUser>
  <MemberRole>
    <Issue IssueTypeID="50">
      <Description>Software Engineer</Description>
    </Issue>
  </MemberRole>
</TeamMember>
<TeamMember>
  <MemberUser>
    <FirstName>Sam</FirstName>
    <LastName>User</LastName>
    <Login>SUSER</Login>
  </MemberUser>
  <MemberRole>
    <Issue IssueTypeID="50">
      <Description>Project Lead</Description>
    </Issue>
  </MemberRole>
</TeamMember>
</TeamMembers>
<Actions />
<Details />
</Incident>
</Incidents>

```

INCIDENT ELEMENTS

The following table describes the behavior for importing a new record or, when applicable, updating certain fields in an existing record. The update behavior applies if the following conditions are met:

- EnableUpdate is “Yes”
- The import configuration element for the relevant field is “Yes” (e.g., UpdateCreator, UpdateOwner, UpdateDetails, etc.)
- The IncidentID matches an existing record

<IncidentID>

The IncidentID element is required but the value is not.

- If the element is empty, the next available incident ID for that entity will be used for the new record.

- If the element has a value that does not match an existing incident ID, the specified value will be used for the new record.
- If the element has a value that matches an existing ID, the behavior depends on EnableUpdate. If “No,” it will be logged as a duplicate in the error log and a new record will not be imported. If “Yes,” certain fields in the existing record may be updated.

<Title>

The Title (string) element is optional. Maximum of 100 characters allowed.

Update: The title will be updated if it does not match the original title.

<Entity>

```
<Entity>
  <EntityID />
  <EntityName />
</Entity>
```

The Entity element is required and it must contain a valid entity. If the Entity is not valid, the incident will not be imported.

Update: Not updateable.

<Creator>

```
<Creator>
  <FirstName />
  <LastName />
  <Login />
</Creator>
```

The Creator element is required, and the Login element must match an existing user. If the Creator element does not contain a valid user, the Incident will not be imported.

Update: The Creator will be updated if the Creator user matches an existing user and differs from the original Creator.

<Owner>

```
<Owner>
  <FirstName />
  <LastName />
  <Login />
</Owner>
```

The Owner element is optional. If present, the login element must match an existing user.

Update: The Owner will be updated if the Owner user matches an existing user and differs from the original Owner.

<AssignedProblems>

```
<AssignedProblems>
  <ProblemID />
</AssignedProblems>
```

The AssignedProblems element is optional. If present, it may contain zero or more ProblemID elements. The ProblemID element value must match an existing Problem ID.

Update: Not updateable

<Type>

```
<Type>
  <Code />
  <Description />
</Type>
```

The Type element is required, and must match an existing incident type. Incident Type values include:

Code	Description
NULL	Serialized Incident

NULL Part Incident
NULL Simple Incident

Update: Not updateable

<ASPFieldServiceTech>

```
<ASPFieldServiceTech>
  <FirstName />
  <LastName />
  <Email />
</ASPFieldServiceTech>
```

The ASPFieldServiceTech element is optional.

If present, the combination of FirstName, LastName and Email element values must match an existing customer. The FirstName and LastName elements are required.

Update: The ASP Field Service Tech will be updated if the the ASP Field Service Tech customer matches an existing customer and differs from the original ASP Field Service Tech. If the UpdateOnly setting is enabled and if no original ASP Field Service Tech is found, one cannot be added.

<OccurrenceDate>

```
<OccurrenceDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</OccurrenceDate>
```

The OccurrenceDate element is required and must contain a valid date.

If the OccurrenceDate element does not contain a valid date, the Incident will not be imported.

Update: The Occurrence Date will be updated if it differs from the original occurrence date.

<CreatedDate>

```
<CreatedDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</CreatedDate>
```

The CreatedDate element is required and must contain a valid date.

If the CreatedDate element does not contain a valid date, the current date will be used.

Update: Not updateable.

<CloseDate>

```
<CloseDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
```

The CloseDate element is optional. If present, it must be a valid date.

Update: The Close Date will be updated if it differs from the original close date.

</CloseDate>

<RepairDurationTime>

The RepairDurationTime element is optional. Export only.

<ResponseTim>

The ResponseTime element is optional. Export only.

<DowntimeForService >

The DowntimeForService element is optional. Export only.

<CustomerSupportNumber>

The CustomerSupportNumber element is optional. Export only.

<TopLevelPart>

```
<TopLevelPart>
  <PartID />
  <PartName />
  <PartNumber />
  <PartVersion />
  <RetiredDate>
    <Year />
    <Month />
    <Day />
    <Hour />
    <Minute />
    <Second />
  <FormattedDate />
</RetiredDate>
  <SerialHID />
  <SerialNumber />

  <TimeMetric1 />
  <TimeMetric2 />
  <TimeMetric3 />
</TopLevelPart>
```

The TopLevelPart element is optional. If present, it must contain a valid part.

The top level part can also be imported through the RepairReplace section by setting the PartOrder equal to 0. It will not be imported if both the TopLevelPart and the RepairReplace(PartOrder = 0) are present and their part values do not match.

The SerialHID and SerialNumber elements are required for serialized incidents. they they must match an existing SerialHID and/or SerialNumber, and they must be at the top level of a Serial System.

The TimeMetric1 (Double), TimeMetric2 (Double) and TimeMetric3 (Double) elements are optional.

Update: TimeMetric1 will be updated if it differs from the original TimeMetric1 and if the original and updated part's SerialHID values match. If the part does not match the original part, the part and TimeMetric1 will be updated.

<ResponsibleParts>

```
<ResponsibleParts>
  <ResponsiblePart />
</ResponsibleParts>
```

The ResponsibleParts element is required. If you don't want to specify part(s), use <ResponsiblePart/> as shown here.

<ResponsiblePart>

```
<ResponsiblePart >
  <Part>
    <PartID />
    <PartName />
    <PartNumber />
    <PartVersion />
  </Part>
  <ResponsibleUser>
    <FirstName />
    <LastName />
    <Login />
  </ResponsibleUser>
  <Retired></Retired>

  <UpdatedBy>
    <FirstName />
    <LastName />
    <Login />
  </UpdatedBy>
  <UpdateDate />
</ResponsiblePart >
```

Alternatively, if you do want to specify one or more part(s), use the ResponsiblePart elements shown here. The Part element is required and must contain an existing valid part.

The ResponsibleUser element is optional and export only. If you wish to change the Responsible User for a part, it can be done through the Template system import or XFRACAS.

The Retired element is optional. If present, it must contain a “Yes” or “No” value. *Default value: “No”*

The UpdatedBy element is optional. It used for responsible part history. If present, it must contain a Login element with a value that matches an existing user. If UpdatedBy is not present or invalid, the user running the import will be used.

The UpdateDate element is optional. It is used for responsible part history.

Update: Responsible parts that differ (part does not match) from the original responsible parts will be added and the original responsible parts will be retired. If no updated responsible part matches a corresponding original responsible part, the original will be retired. If the UpdateOnly setting is enabled, only existing responsible parts can be used to update the ResponsiblePart.

<Chargeable>

The Chargeable element is optional. Export Only. The value, “Yes” or “No,” is determined by the current Incident category type.

<UnderWarranty>

The UnderWarranty element is optional. If present, it must contain a “Yes” or “No” value. If the value does not match “Yes” or “No,” NULL will be inserted, the same as if the element was not present.

Update: Not updateable.

<WarrantyOverride>

The WarrantyOverride element is optional. If present, it must contain a “Yes” or “No” value. If the value does not match “Yes” or “No,” NULL will be inserted, the same as if the element was not present.

Update: Not updateable.

<CustomerRequestedFeedback>

The CustomerRequestedFeedback element is optional. If present, it must contain a “Yes” or “No” value. If the value does not match “Yes” or “No,” NULL will be inserted, the same as if the element was not present.

Update: If the imported value is valid and differs from the original value, CustomerRequestedFeedback will be updated.

<ServiceResponseDate>

```
<ServiceResponseDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</ServiceResponseDate>
```

The ServiceResponseDate element is optional. If present, it must be a valid date.

Update: The service response date will be updated if it differs from the original service response date.

<UnitLocation>

The UnitLocation element is optional and export only.

<Address>

```
<Address>
  <AddressLine1 />
  <AddressLine2 />
  <City />
  <State />
  <ZipCode />
  <Location />
</Address>
```

The Address element is optional. If the Address element contains any child elements, a combination of those values must match an existing address.

Update: The address will be updated if a combination of the Address element’s child elements values match an existing address and it differs from the original address.

<Statuses>

```
<Statuses>
  <Status />
</Statuses>
```

The Statuses element is required. It must contain one or more Status elements. This element contains data about the Incident State. Only one Status can have a Retired value of “No.”

<Status>

```
<Status>
  <Issue IssueTypeID= >
    <Code />
    <Description />
  </Issue>
```

At least one Status element is required. The Status element must contain an existing Issue element with an IssueTypeID equal to 8 (Incident State) or 48 (Incident State Closed) and a valid Date element. If the InsertIncidentIssues setting is enabled and an existing issue is not found, a new issue will be inserted.

```
<Date>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</Date>
<UpdatedBy />
```

The Date element is required and must be a valid date.

```
<Retired />
```

The UpdatedBy element is optional. If present, it must contain a Login element that matches an existing user. If not present, then the user doing the import will be used.

The Retired element is optional. If present, it must contain a “Yes” or “No” value. If the value is empty, the default value will be “No.”

```
</Status>
```

Update: Updated statuses that are valid and differ from an original status will be inserted and the corresponding original status will be retired. Original statuses that are not present in the updated statuses will be retired. There can be only one current status.

<Categories>

```
<Categories>
  <Category />
</Categories>
```

The Categories element is required. It must contain one or more Category elements. Only one Category can have a Retired value of “No.”

<Category>

```
<Category>
  <Issue IssueTypeID= >
    <Code />
    <Description />
  </Issue>
  <Date>
    <Year />
    <Month />
    <Day />
    <Hour />
    <Minute />
    <Second />
    <FormattedDate />
  </Date>
```

At least one Category element is required. The Category element must contain an existing Issue element and a valid Date element. If the InsertIncidentIssues setting is enabled and an existing issue is not found, a new issue will be inserted.

```
<UpdatedBy />
```

The UpdatedBy element is optional. If present, it must contain a Login element that matches an existing user.

```
<Retired />
```

The Retired element is optional. If present, it must contain a “Yes” or “No” value. If no value is present the default value will be “No.”

```
<Chargeable />
```

The Chargeable element is export only. The value is determined by the Issue Type of the above issue.

ID	Description	Chargeable Value
20	Incident Category Chargeable	"Yes"
21	Incident Category Non-Chargeable	"No"

</Category>

Update: Updated categories that are valid and differ from an original category will be inserted and the corresponding original category will be retired. Original categories that are not present in the updated categories will be retired. There can be only one current category.

<SystemStatuses>

<SystemStatuses>
<SystemStatus />
</SystemStatuses>

The SystemStatuses element is optional. It may contain zero or more SystemStatus elements. Only one SystemStatus can have a Retired value of "No."

<SystemStatus>

<SystemStatus>
<Issue IssueTypeID="14" >
<Code />
<Description />
</Issue>
<Date>
<Year />
<Month />
<Day />
<Hour />
<Minute />
<Second />
<FormattedDate />
</Date>
<UpdatedBy />

<Retired />

</SystemStatus>

The SystemStatus element is optional. It must contain an existing valid Issue element with an IssueTypeID equal to 14 (Incident System Status) and a valid Date element. If the InsertIncidentIssues setting is enabled and an existing issue is not found, a new issue will be inserted.

The UpdatedBy element is optional. If present, it must contain a Login element that matches an existing valid User. If not present, then the user doing the import will be used.

The Retired element is optional. If present, it must contain a "Yes" or "No" value. If a value is not present, the default value will be "No."

Update: Updated system statuses that are valid and differ from an original system status will be inserted and the corresponding original system status will be retired. Original system statuses that are not present in the updated system statuses will be retired. There can be only one current system status.

<ReportTypes>

<ReportTypes>
<ReportType />
</ReportType>

The ReportTypes element is required. It must contain one or more ReportType elements. Only one ReportType can have a Retired value of "No."

<ReportType>

<pre><ReportType> <StatusDescription <Issue IssueTypeID="38"> <Code /> <Description /> </Issue> </StatusDescription> <Date /> <Year /> <Month /> <Day /> <Hour /> <Minute /> <Second /> <FormattedDate /> </Date> <Retired /> <UpdatedBy /> </ReportType></pre>	<p>At least one ReportType element is required. The ReportType element must contain an existing valid Issue element with an IssueTypeID equal to 38 (Incident Report Type). If the InsertIncidentIssues setting is enabled and an existing issue is not found, a new issue will be inserted.</p> <p>The Date element is required and must contain a valid date.</p> <p>The Retired element is optional. If present, it must contain a "Yes" or "No" value. If no value is present, the default value will be "No."</p> <p>The UpdatedBy element is optional. If present, it must contain a Login element that matches an existing valid User. If not present, then the user doing the import will be used.</p> <p>Update: Updated report types that are valid and differ from an original report type will be inserted and the corresponding original report type will be retired. Original report types that are not present in the updated report types will be retired. There can be only one current report type.</p>
--	--

<RepairReplaces>

<pre><RepairReplaces> <RepairReplace /> </RepairReplaces></pre>	<p>The RepairReplaces element is optional and may contain zero or more RepairReplace elements.</p>
---	--

<RepairReplace PartOrder= >

When importing a Serialized or Part incident, the Top Level Part may be specified by creating a RepairRepace element with a PartOrder of 0 and a valid OldPart. The Top Level Part can also be imported using the TopLevelPart element. A top level part will only be imported here if the part matches the TopLevelPart or the TopLevelPart element is empty. It is recommended that the top level part and time metrics be imported using the TopLevelPart element.

For simple, part and serialized incidents, when PartOrder is greater than 0, the PartOrder controls the display line order for the repair/replace section.

<pre><RepairReplace PartOrder= ></pre>	<p>The RepairReplace element is optional. The PartOrder (integer) attribute is required.</p>
--	--

```
<OldPart>
  <PartID />
  <PartName />
  <PartNumber />
  <PartVersion />
  <RetiredDate>
    <Year />
    <Month />
    <Day />
    <Hour />
    <Minute />
    <Second />
    <FormattedDate />
  </RetiredDate>
  <SerialHID />
  <SerialNumber />
```

The OldPart element is required. It must be a valid part, and can have an optional SerialHID element whose value matches an existing SerialHID.

The SerialHID element links the Repair Replace Part to a position in a Serial System.

```
</OldPart>
<NewPart>
  <PartID />
  <PartName />
  <PartNumber />
  <PartVersion />
  <RetiredDate>
    <Year />
    <Month />
    <Day />
    <Hour />
    <Minute />
    <Second />
    <FormattedDate />
  </RetiredDate>
  <SerialHID />
  <SerialNumber />
```

The NewPart element is optional. If present, it must be a valid part and can have an optional SerialHID element whose value matches an existing SerialHID.

```
</Newpart>
<PartFailure>
  <FailureType>
    <Issue IssueTypeID= >
      <Code />
      <Description />
    </Issue>
  </FailureType>
  <Chargeable />
</PartFailure>
<FailureAnalyses />
```

The PartFailure type element is optional. If present, it must contain a FailureType element, which must be a valid issue with an IssueTypeID listed below. If the InsertIncidentIssues setting is enabled and the issue does not match an existing issue, a new issue will be inserted.

ID	Description	Chargeable Value
22	Incident Failure Type Chargeable	"Yes"
23	Incident Failure Type Non-Chargeable	"No"

Failure Analyses are optional. See "[Failure Analysis Reports.](#)"

```
<PartDisposition>
  <Issue IssueTypeID="13">
    <Code />
    <Description />
  </Issue>
</PartDisposition>
```

The PartDisposition element is optional. If present, it must contain a valid issue with an IssueTypeID equal to 13 (Incident Parts Disposition). If the InsertIncidentIssues setting is enabled and the issue does not match an existing issue, a new issue will be inserted.

UNRESTRICTED

<pre><SalesOrderNumber /></pre>	SalesOrderNumber is optional.
<pre><RMANumber /></pre>	The RMANumber (string) element is optional.
<pre><RMAReceivedDate > <Year /> <Month /> <Day /> <Hour /> <Minute /> <Second /> <FormattedDate /> </RMARecievedDate></pre>	The RMAReceivedDate element is optional and, if present, must contain a valid date.
<pre><ChangeDate> <Year /> <Month /> <Day /> <Hour /> <Minute /> <Second /> <FormattedDate /> </ChangeDate></pre>	The ChangeDate element is optional and, if present, must contain a valid date.
<pre><StartingAge /> <StartingAge2 /> <StartingAge3 /></pre>	The StartingAge, StartingAge2, and StartingAge3 (integer) elements are optional.
<pre><TimeMetric1 /> <TimeMetric2 /> <TimeMetric3 /></pre>	The TimeMetric1, TimeMetric2, and TimeMetric3 (Double) elements are optional.
<pre><HoursToFailure /> <HoursToFailure2 /> <HoursToFailure3 /></pre>	The HoursToFailure, HoursToFailure2, and HoursToFailure3 elements are optional.
<pre></RepairReplace></pre>	Update: Not updateable.

<ActualCriticality>

Calculated value. Export only.

<PotentialCriticality>

Calculated value. Export only.

<Criticality>

See "[Criticality](#)."

<TeamMembers>

See "[Team Members](#)."

<Actions>

See "[Actions.](#)"

<Details>

See "[Details.](#)"

Problems

PROBLEM XML SAMPLE

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Problems SYSTEM "Problem.dtd"[]>
<Problems xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ExportData>
    <ReportGenerated>09/16/2013 09:40 AM</ReportGenerated>
    <GeneratedBy>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </GeneratedBy>
    <GMTOffset>-7</GMTOffset>
  </ExportData>
  <Problem>
    <ProblemID>PRR-1</ProblemID>
    <Title>Test Problem</Title>
    <Entity>
      <EntityID>1</EntityID>
      <EntityName>XFRACAS Software</EntityName>
    </Entity>
    <Owner>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </Owner>
    <Creator>
      <FirstName>Sam</FirstName>
      <LastName>User</LastName>
      <Login>SUSER</Login>
    </Creator>
    <OpenDate>
      <Year>2013</Year>
      <Month>6</Month>
      <Day>20</Day>
      <Hour>17</Hour>
      <Minute>33</Minute>
      <Second>0</Second>
      <FormattedDate>06/20/2013 10:33 AM</FormattedDate>
    </OpenDate>
  </Problem>
</Problems>
```



```
</OpenDate>
<RequestedClosureDate>
  <Year>2013</Year>
  <Month>7</Month>
  <Day>20</Day>
  <Hour>17</Hour>
  <Minute>33</Minute>
  <Second>0</Second>
  <FormattedDate>07/20/2013 10:33 AM</FormattedDate>
</RequestedClosureDate>
<ExpectedClosureDate>
  <Year>2013</Year>
  <Month>7</Month>
  <Day>20</Day>
  <Hour>17</Hour>
  <Minute>33</Minute>
  <Second>0</Second>
  <FormattedDate>07/20/2013 10:33 AM</FormattedDate>
</ExpectedClosureDate>
<ClosedDate />
<FirstOccurrenceDate>
  <Year>2004</Year>
  <Month>3</Month>
  <Day>31</Day>
  <Hour>1</Hour>
  <Minute>5</Minute>
  <Second>0</Second>
  <FormattedDate>03/30/2004 06:05 PM</FormattedDate>
</FirstOccurrenceDate>
<LastOccurrenceDate>
  <Year>2013</Year>
  <Month>6</Month>
  <Day>14</Day>
  <Hour>17</Hour>
  <Minute>36</Minute>
  <Second>0</Second>
  <FormattedDate>06/14/2013 10:36 AM</FormattedDate>
</LastOccurrenceDate>
<Priority>
  <Issue IssueTypeID="9">
    <Code>1</Code>
    <Description>Not Assigned</Description>
  </Issue>
```

UNRESTRICTED

```

</Priority>
<FRBStatus>
  <Issue IssueTypeID="46">
    <Code>02B</Code>
    <Description>Describe Problem Review - Complete</Description>
  </Issue>
</FRBStatus>
<ProcessStatus>
  <Issue IssueTypeID="6">
    <Code>02</Code>
    <Description>Describe the Problem</Description>
  </Issue>
</ProcessStatus>
<Part>
  <PartID>2</PartID>
  <PartName>Example Part</PartName>
  <PartNumber>EP2</PartNumber>
  <PartVersion>A</PartVersion>
  <RetiredDate />
</Part>
<ShowStep3>No</ShowStep3>
<ShowStep4>No</ShowStep4>
<ShowStep6>No</ShowStep6>
<ShowStep8>No</ShowStep8>
<Incidents>
  <Incident>
    <IncidentID>FR-I-3781</IncidentID>
    <ReportType>Incident State</ReportType>
    <CategoryType>Non Chargeable</CategoryType>
    <ReportIssue>
      <Issue IssueTypeID="38">
        <Description>Prerelease or Staging</Description>
      </Issue>
    </ReportIssue>
    <CategoryIssue>
      <Issue IssueTypeID="21">
        <Description>Cleanup</Description>
      </Issue>
    </CategoryIssue>
  </Incident>
  <Incident>
    <IncidentID>FR-I-3842</IncidentID>
    <ReportType>Incident State</ReportType>
  </Incident>

```

```

<CategoryType>Non Chargeable</CategoryType>
<ReportIssue>
  <Issue IssueTypeID="38">
    <Description>Prerelease or Staging</Description>
  </Issue>
</ReportIssue>
<CategoryIssue>
  <Issue IssueTypeID="21">
    <Description>Cleanup</Description>
  </Issue>
</CategoryIssue>
</Incident>
</Incidents>
<Reviews>
  <Review>
    <Reviewer>
      <FirstName>Nicole</FirstName>
      <LastName>User</LastName>
      <Login>NUSER</Login>
    </Reviewer>
    <SignOffDate>
      <Year>2013</Year>
      <Month>9</Month>
      <Day>13</Day>
      <Hour>7</Hour>
      <Minute>0</Minute>
      <Second>0</Second>
      <FormattedDate>09/13/2013 12:00 AM</FormattedDate>
    </SignOffDate>
    <ClosureRejectComment />
    <ReviewType>
      <ReviewTypeID>7</ReviewTypeID>
      <ReviewTypeName>D7 FRB Approval</ReviewTypeName>
    </ReviewType>
    <SentEmailNoticeDate />
    <RetiredDate />
    <DeleteComment />
    <SignOffOrder>3</SignOffOrder>
    <UserCategory>
      <UserCategoryID>10</UserCategoryID>
      <UserCategoryName>D7 Approver</UserCategoryName>
    </UserCategory>
  </Review>

```

UNRESTRICTED

```

</Reviews>
<Criticalities />
<TeamMembers>
  <TeamMember>
    <MemberUser>
      <FirstName>Doug</FirstName>
      <LastName>User</LastName>
      <Login>DUSER</Login>
    </MemberUser>
    <MemberRole>
      <Issue IssueTypeID="50">
        <Description>Legal</Description>
      </Issue>
    </MemberRole>
  </TeamMember>
</TeamMembers>
</Problem>
</Problems>

```

PROBLEM ELEMENTS

<ProblemID>

The ProblemID element is required.

- If the ProblemID element value matches an existing problem ID, the problem will not be imported.
- If the ProblemID element value is not empty and does **not** match an existing problem ID, the specified ProblemID element value will be used.
- If the ProblemID element value is empty, the next available problem ID will be used.

<Entity>

```

<Entity>
  <EntityID />
  <EntityName />
</Entity>

```

The Entity element is required and must contain a valid entity. If the entity is not valid the problem will not be imported.

<Owner>

```

<Owner>
  <FirstName />
  <LastName />
  <Login />
</Owner>

```

The Owner element is required, and the Login element value must match an existing user.

If the Owner element does not contain a valid user, the problem will not be inserted.

<Creator>

```
<Creator>
  <FirstName />
  <LastName />
  <Login />
</Creator>
```

The Creator element is optional and, if present, the Login element value must match an existing user.

<OpenDate>

```
<OpenDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</OpenDate>
```

The OpenDate element is required. If the date entered is not valid or empty, then the current date and time will be inserted.

<RequestedClosureDate>

```
<RequestedClosureDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</RequestedClosureDate>
```

The RequestedClosureDate element is optional and, if present, must contain a valid date.

<ExpectedClosureDate>

```
<ExpectedClosureDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</ExpectedClosureDate>
```

The ExpectedClosureDate element is optional and, if present, must contain a valid date.

<ClosedDate>

```
<ClosedDate>
  <Year />
  <Month />
  <Day />
  <Hour />
```

The ClosedDate element is optional and, if present, must contain a valid date.

```
<Minute />
<Second />
<FormattedDate />
</CloseDate>
```

<FirstOccurrenceDate>

```
<FirstOccurrenceDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</FirstOccurrenceDate>
```

The FirstOccurrenceDate is optional and, if present, must contain a valid date. Export only.

<LastOccurrenceDate>

```
<LastOccurrenceDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</LastOccurrenceDate>
```

The LastOccurrenceDate element is optional and, if present, must contain a valid date. Export only.

<Priority>

```
<Priority>
  <Issue IssueTypeID="9">
    <Code />
    <Description />
  </Issue>
</Priority>
```

The Priority element is required and must contain an existing valid issue with an IssueTypeID equal to 9 (PRR Priority).

<CloseStatus>

```
<CloseStatus>
  <Issue IssueTypeID="19">
    <Code />
    <Description />
  </Issue>
</CloseStatus>
```

The CloseStatus element is optional and, if present, must contain an existing valid issue with an IssueTypeID equal to 19 (PRR Close Status).

<FRBStatus>

```
<FRBStatus>
  <Issue IssueTypeID="46">
```

The FRBStatus element is required and must contain an existing valid issue with an IssueTypeID equal to 46 (PRR Status Review).

```

    <Code />
    <Description />
  </Issue>
</FRBStatus >

```

<ProcessStatus>

```

<ProcessStatus>
  <Issue IssueTypeID="6">
    <Code />
    <Description />
  </Issue>
</ProcessStatus>

```

The ProcessStatus element is optional and, if present, must contain an existing valid issue with an IssueTypeID equal to 6 (PRR Status). This element will not be populated if the Problem is closed. PRR Status Issues include:

Code	Description
	Define – Define the Team
	Describe the Problem
	Develop Containment
	Define and Verify Root Cause
	Determine Corrective Action(s)
	Verify Corrective Actions(s)
	Prevent Recurrence
	Additional Comments

<Part>

```

<Part>
  <PartName />
  <PartNumber />
  <PartVersion />
  <RetiredDate />
</Part>

```

The Part element is optional and, if present, must contain an existing valid part.

<Incidents>

```

<Incidents>
  <Incident />
</Incidents>

```

The Incidents element is optional and may contain zero or more Incident elements

<Incident>

```

<Incident>
  <IncidentID />
  <ReportType />
  <CategoryType />
  <ReportIssue>
    <Issue IssueTypeID="38">
      <Code />
      <Description />
    </Issue>
  </ReportIssue>
</Incident>

```

The Incident element is optional.

The IncidentID element is required. It must contain an existing incident ID.

The ReportType (string) element is optional. Its value will be "Incident State" (IssueTypeID=8) or "Incident State Closed" (IssueTypeID=48). Export only.

The CategoryType (string) element is optional. Its value will be "Chargeable" (IssueTypeID=20) or "Non Chargeable" (IssueTypeID=21). Export only.

The ReportIssue element is optional and, if present, must contain an issue with an IssueTypeID equal to 38 (Incident Report Type). Export only.

```

</ReportIssue>
<CategoryIssue>
  <Issue IssueTypeID= >
    <Code />
    <Description />
  </Issue>
</CategoryIssue>
</Incident>

```

The CategoryIssue element is optional and, if present, must contain an issue with an IssueTypeID equal to 20 (Chargeable) or 21 (Non Chargeable). Export only.

<ProjectIDs>

```

<ProjectIDs>
  <ProjectID />
</ProjectIDs>

```

The ProjectIDs element is optional. If present, it must contain one or more ProjectID elements that contain an existing project ID. The ProjectID element is used to associate a project with the current problem.

<Reviews>

```

<Reviews>
  <Review />
</Reviews>

```

The Reviews element is optional and can contain zero or more Review elements.

<Review>

```

<Review>
  <Reviewer>
    <FirstName />
    <LastName />
    <Login />
  </Reviewer>
  <SignOffDate>
    <Year />
    <Month />
    <Day />
    <Hour />
    <Minute />
    <Second />
  <FormattedDate />
</SignOffDate>
  <ClosureRejectComment />
  <ReviewType>
    <ReviewTypeID />
    <ReviewTypeName />
  </ReviewType>

```

The Reviewer element is optional, and the Login element value must match an existing user.

The SignOffDate element is optional and, if present, must contain a valid date.

The ClosureRejectComment (string) element is optional.

The ReviewType element is required and the ReviewTypeName and ReviewTypeID element values must match an existing review type (FRB Step) or a user-created review type. Review Types:

ID	Name
2	D2 FRB Approval
3	D3 FRB Approval
4	D4 FRB Approval
5	D5 FRB Approval
6	D6 FRB Approval

- 7 D7 FRB Approval
- 8 D8 FRB Approval

```

<SentEmailNoticeDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</SentEmailNoticeDate>
<RetiredDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</RetiredDate>
<DeleteComment />
<SignOffOrder />
<UserCategory>
  <UserCategoryID>
  <UserCategoryName>
</UserCategory>
</Review>

```

The SentEmailNoticeDate element is optional and, if present, must contain a valid date.

The RetiredDate element is optional and, if present, must contain a valid date.

The DeleteComment (string) element is optional.

The SignOffOrder (integer) element is optional.

The UserCategory element is required and the UserCategoryName element value must match an existing user category

<Criticality>

See "[Criticality.](#)"

<TeamMembers>

See "[Team Members.](#)"

<Actions>

See "[Actions.](#)"

<Details>

See "[Details.](#)"

Customer Support Records

CSI XML SAMPLE

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE UnitCommissionings SYSTEM "UnitCommissioning.dtd"[]>
<UnitCommissionings xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ExportData>
    <ReportGenerated>09/16/2013 10:41 AM</ReportGenerated>
    <GeneratedBy>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </GeneratedBy>
    <GMTOffset>-7</GMTOffset>
  </ExportData>
</UnitCommissionings>
  <UnitCommissioning>
    <CSIID>CSI-1</CSIID>
    <Entity>
      <EntityID>1</EntityID>
      <EntityName>XFRACAS Software</EntityName>
    </Entity>
    <Creator>
      <FirstName>Sam</FirstName>
      <LastName>User</LastName>
      <Login>SUSER</Login>
    </Creator>
    <SerialHID>1</SerialHID>
    <Terms>
      <Issue IssueTypeID="34">
        <Description>Parts and Labor</Description>
      </Issue>
    </Terms>
    <CommissionDate>
      <Year>2000</Year>
      <Month>7</Month>
      <Day>15</Day>
      <Hour>1</Hour>
      <Minute>0</Minute>
      <Second>0</Second>
    </CommissionDate>
  </UnitCommissioning>
</UnitCommissionings>
```

UNRESTRICTED

```

    <FormattedDate>07/14/2000 06:00 PM</FormattedDate>
  </CommissionDate>
  <DecommissionDate />
  <CreateDate>
    <Year>2005</Year>
    <Month>3</Month>
    <Day>22</Day>
    <Hour>19</Hour>
    <Minute>59</Minute>
    <Second>41</Second>
    <FormattedDate>03/22/2005 12:59 PM</FormattedDate>
  </CreateDate>
  <WarrantyExpirationDate>
    <Year>2013</Year>
    <Month>1</Month>
    <Day>15</Day>
    <Hour>0</Hour>
    <Minute>0</Minute>
    <Second>0</Second>
    <FormattedDate>01/14/2013 05:00 PM</FormattedDate>
  </WarrantyExpirationDate>
  <WarrantyMonthShip>12</WarrantyMonthShip>
  <WarrantyMonthCommission>12</WarrantyMonthCommission>
  <WarrantyType>
    <WarrantyTypeID>1</WarrantyTypeID>
    <WarrantyTypeName>To Distributor</WarrantyTypeName>
  </WarrantyType>
  <ExtendedWarrantyPeriod>138</ExtendedWarrantyPeriod>
  <ExtendedWarrantyPurchaseDate>
    <Year>2009</Year>
    <Month>10</Month>
    <Day>1</Day>
    <Hour>7</Hour>
    <Minute>0</Minute>
    <Second>0</Second>
    <FormattedDate>10/01/2009 12:00 AM</FormattedDate>
  </ExtendedWarrantyPurchaseDate>
  <InstallDetails />
  <ShipDate>
    <Year>2000</Year>
    <Month>12</Month>
    <Day>4</Day>
    <Hour>7</Hour>

```

```

    <Minute>0</Minute>
    <Second>0</Second>
    <FormattedDate>12/04/2000 12:00 AM</FormattedDate>
  </ShipDate>
  <DeliveryDate />
  <Address>
    <AddressLine1>123 Fake St.</AddressLine1>
    <AddressLine2 />
    <City>Tucson</City>
    <State>Arizona</State>
    <Country>United States</Country>
    <ZipCode>85710</ZipCode>
    <Location>TUS</Location>
  </Address>
  <IncidentSystemStatus>
    <Issue IssueTypeID="14">
      <Code>46</Code>
      <Description>Running - Needs Service</Description>
    </Issue>
  </IncidentSystemStatus>
  <CSICategories>
    <CSICategory>
      <CategoryData>
        <CategoryID>6</CategoryID>
        <CategoryName>Owner</CategoryName>
      </CategoryData>
      <Companies>
        <Company>
          <CompanyID>2</CompanyID>
          <CompanyName>Plug Power</CompanyName>
        </Company>
      </Companies>
    </CSICategory>
    <CSICategory>
      <CategoryData>
        <CategoryID>7</CategoryID>
        <CategoryName>Contact</CategoryName>
      </CategoryData>
      <Customers>
        <Customer>
          <CustomerID>2</CustomerID>
          <FirstName>Bob</FirstName>
          <LastName>User</LastName>
        </Customer>
      </Customers>
    </CSICategory>
  </CSICategories>

```

```

        <Email>buser@example.com</Email>
    </Customer>
</Customers>
</CSICategory>
<CSICategory>
    <CategoryData>
        <CategoryID>14</CategoryID>
        <CategoryName>Distributor</CategoryName>
    </CategoryData>
    <Companies>
        <Company>
            <CompanyID>1</CompanyID>
            <CompanyName>ReliaSoft Corporation</CompanyName>
        </Company>
    </Companies>
</CSICategories>
<Actions />
<Details />
</UnitCommissioning>
</UnitCommissionings>

```

CSI ELEMENTS

<CSIID>

The CSIID element is required.

- If the CSIID element value matches an existing CSIID, the CSI will not be imported.
- If the CSIID element value is not empty and does not match an existing CSIID, the specified CSIID element value will be used. If the CSIID element value is empty, the next available CSIID will be used.

<Entity>

```

<Entity>
  <EntityID />
  <EntityName />
</Entity>

```

The Entity element is required and it must contain a valid entity. If the Entity is not valid, the CSI will *not* be imported.

<Creator>

```

<Creator>
  <FirstName />
  <LastName />
  <Login />
</Creator>

```

The Creator element is required, and the Login element value must match an existing user. If the Creator element does not contain a valid user, the CSI will not be imported.

<SerialHID>

The SerialHID element is required and must match an existing Serial HID; otherwise, the CSI will not be imported.

<Terms>

<pre><Terms> <Issue IssueTypeID="34"> <Code /> <Description /> </Issue> </Terms></pre>	<p>The Terms element is optional and, if present, must contain an existing valid issue with an IssueTypeID equal to 34 (CSI Extended Warranty Terms).</p>
--	---

<CommissionDate>

<pre><CommissionDate> <Year /> <Month /> <Day /> <Hour /> <Minute /> <Second /> <FormattedDate /> </CommissionDate></pre>	<p>The CommissionDate element is optional and, if present, must contain a valid date.</p>
---	---

<DecommissionDate>

<pre><DecommissionDate> <Year /> <Month /> <Day /> <Hour /> <Minute /> <Second /> <FormattedDate /> </DecommissionDate></pre>	<p>The DecommissionDate element is optional and, if present, must contain a valid date.</p>
---	---

<CreatedDate>

<pre><CreatedDate> <Year /> <Month /> <Day /> <Hour /> <Minute /> <Second /> <FormattedDate /> </CreatedDate></pre>	<p>The CreatedDate element is required and must contain a valid date. If the CreatedDate is not valid, the CSI will not be imported.</p>
---	--

UNRESTRICTED

<WarrantyExpirationDate>

<WarrantyExpirationDate>
 <Year />
 <Month />
 <Day />
 <Hour />
 <Minute />
 <Second />
 <FormattedDate />
 </WarrantyExpirationDate>

The WarrantyExpirationDate element is optional. The WarrantyExpirationDate is calculated based on the WarrantyType, ExtenderWarrantyPeriod, ShipDate, ComissionDate, DeliveryDate, WarrantyMonthShip and WarrantyMonthCommission. This calculated value must be a valid date. Export only.

<WarrantyMonthShip>

The WarrantyMonthShip (integer) element is required.

<WarrantyMonthCommission>

The WarrantyMonthCommission (integer) element is required.

<WarrantyType>

<WarrantyType>
 <WarrantyTypeID />
 <WarrantyTypeName />
 </WarrantyType>

The WarrantyType element is optional. If present, it must have WarrantyTypeID (integer) element value of either 1 or 2. The value will default to 1. The WarrantyTypeName element is present for documentation purposes only.

WarrantTypeID:
 1 = To Distributor
 2 = To End User

<ExtendedWarrantyPeriod>

The ExtendedWarrantyPeriod (integer) element is optional.

<ExtendedWarrantyPurchaseDate>

<ExtendedWarrantyPurchaseDate>
 <Year />
 <Month />
 <Day />
 <Hour />
 <Minute />
 <Second />
 <FormattedDate />
 </ExtendedWarrantyPurchaseDate>

The ExtendedWarrantyPurchaseDate element is optional and, if present, must contain a valid date.

<InstallDetails>

The InstallDetails (string) element is optional.

<ShipDate>

```
<ShipDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</ShipDate>
```

The ShipDate element is optional and, if present, must contain a valid date.

<DeliveryDate>

```
<DeliveryDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</DeliveryDate>
```

The DeliveryDate element is optional and, if present, must contain a valid date.

<Address>

```
<Address>
  <City />
  <State />
  <Country />
  <ZipCode />
  <Location />
</Address>
```

The Address element is required and must contain a valid address.

The Location element is required and its value must match an existing address location.

If the address is not valid, the CSI will not be inserted.

<IncidentSystemStatus>

```
<IncidentSystemStatus>
  <Issue IssueTypeID="14">
    <Code />
    <Description />
  </Issue>
</IncidentSystemStatus>
```

The IncidentSystemStatus element is export only.

<CSICategories>

```
<CSICategories>
  <CSICategory />
</CSICategories>
```

The CSICategories element is required, and must contain two or more CSICategory elements. Two CSICategory elements are required and must contain the following category data: Owner (CategoryID=6) and Distributor (CategoryID=14).

<CSICategory>

```
<CSICategory>
  <CategoryData>
    <CategoryID />
    <CategoryName />
  </CategoryData>
  <Companies>
    <Company>
      <CompanyID />
      <CompanyName />
    </Company>
  </Companies>
  <Customers>
    <Customer>
      <CustomerID />
      <FirstName />
      <LastName />
      <Email />
    </Customer>
  </Customers>
</CSICategory>
```

The CategoryData element is required.

If the CategoryID element value matches an existing category, that category will be used. If the CategoryID element is not present, the CategoryName element value will be used to match an existing category. If neither value matches an existing category, the category will not be inserted. Categories include:

CategoryID	CategoryName	Category Type
5	Customer	Customer
6	Owner	Company
7	Contact	Customer
9	Authorized Service Provider (ASP)	Company
10	ASP Field Technician	Customer
11	Service Manager	Customer
12	Alternate Lead	Customer
13	External User	Customer
14	Distributor	Company
16	Course Instructor	Customer

The Customers or Companies element is required, depending on the the Category Type. Refer to the table above.

The Company element must contain a CompanyName element whose value matches an existing company.

The Customer element must contain a valid customer. The FirstName and LastName elements are required and the optional Email element must match an existing Customer.

<Actions>

See "[Actions.](#)"

<Details>

See "[Details.](#)"

Projects

PROJECT XML SAMPLE

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Projects SYSTEM "Project.dtd"[]>
<Projects xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ExportData>
    <ReportGenerated>09/16/2013 03:01 PM</ReportGenerated>
    <GeneratedBy>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </GeneratedBy>
    <GMTOffset>-7</GMTOffset>
  </ExportData>
  <Project>
    <ProjectID>Project-1</ProjectID>
    <Title>Example Project</Title>
    <Entity>
      <EntityID>1</EntityID>
      <EntityName>XFRACAS Software</EntityName>
    </Entity>
    <Owner>
      <FirstName>Sam</FirstName>
      <LastName>User</LastName>
      <Login>SUSER</Login>
    </Owner>
    <ProjectNotes1>Example project notes</ProjectNotes1>
    <ProjectNotes2>More example project notes</ProjectNotes2>
    <StartDate>
      <Year>2005</Year>
      <Month>10</Month>
      <Day>1</Day>
      <Hour>7</Hour>
      <Minute>0</Minute>
      <Second>0</Second>
      <FormattedDate>10/01/2005 12:00 AM</FormattedDate>
    </StartDate>
    <InitialCompleteDate>
      <Year>2005</Year>
```

```

    <Month>10</Month>
    <Day>31</Day>
    <Hour>7</Hour>
    <Minute>0</Minute>
    <Second>0</Second>
    <FormattedDate>10/31/2005 12:00 AM</FormattedDate>
  </InitialCompleteDate>
  <RevisedCompleteDate>
    <Year>2013</Year>
    <Month>9</Month>
    <Day>12</Day>
    <Hour>21</Hour>
    <Minute>30</Minute>
    <Second>0</Second>
    <FormattedDate>09/12/2013 02:30 PM</FormattedDate>
  </RevisedCompleteDate>
  <CompleteDate>
    <Year>2006</Year>
    <Month>1</Month>
    <Day>18</Day>
    <Hour>7</Hour>
    <Minute>0</Minute>
    <Second>0</Second>
    <FormattedDate>01/18/2006 12:00 AM</FormattedDate>
  </CompleteDate>
  <Priority>
    <Issue IssueTypeID="47">
      <Code>1</Code>
      <Description>High</Description>
    </Issue>
  </Priority>
  <AssignedProblems>
    <ProblemID>Problem-1</ProblemID>
  </AssignedProblems>
  <Actions />
  <Details />
</Project>
</Projects>

```

UNRESTRICTED

PROJECT ELEMENTS

<ProjectID>

The ProjectID element is required.

- If the ProjectID element value matches an existing project ID, the project will *not* be imported.
- If the ProjectID element value is not empty and does *not* match an existing project ID, the specified ProjectID element value will be used.
- If the ProjectID element value is empty, the next available project ID will be used.

<Entity>

```
<Entity>
  <EntityID />
  <EntityName />
</Entity>
```

The Entity element is required and must contain a valid entity. If the Entity is not valid, the Project will *not* be imported.

<Owner>

```
<Owner>
  <FirstName />
  <LastName />
  <Login />
</Owner>
```

The Owner element is required, and the Login element value must match an existing user. If the Owner does not contain a valid User, the Project will not be imported.

<ProjectNotes1>

The ProjectNotes1 (string) element is optional. (Scope of Project).

<ProjectNotes>

The ProjectNotes2 (string) element is optional. (End Result)

<StartDate>

```
<StartDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</StartDate>
```

The StartDate element is required and, if present, must contain a valid date. If the StartDate element does not contain a valid date, the Project will not be imported.

<InitialCompleteDate>

```
<InitialCompleteDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</InitialCompleteDate>
```

The InitialCompleteDate element is required and, if present, must contain a valid date. If the InitialCompleteDate element does not contain a valid date, the Project will not be imported.

<RevisedCompleteDate>

```
<RevisedCompleteDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</RevisedCompleteDate>
```

The RevisedCompleteDate element is required and, if present, must contain a valid date. If the RevisedCompleteDate element does not contain a valid date, the Project will not be imported.

<Priority>

```
<Priority>
  <Issue IssueTypeID="47">
    <Code />
    <Description />
  </Issue>
</Priority>
```

The Priority element is required and must match an existing valid issue with an IssueTypeID equal to 47 (Project Priority).

<AssignedProblems>

```
<AssignedProblems>
  <ProblemID />
</AssignedProblems>
```

The AssignedProblems element is optional. If present, it may contain zero or more ProblemID elements. The ProblemID element must match an existing problem ID.

<TeamMembers>

See "[Team Members.](#)"

<Actions>

See "[Actions.](#)"

<Details>

See "[Details.](#)"

Failure Analysis Reports

FAILURE ANALYSIS XML SAMPLE

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE FailureAnalyses SYSTEM "FailureAnalysis.dtd"[]>
<FailureAnalyses xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ExportData>
    <ReportGenerated>09/17/2013 01:09 PM</ReportGenerated>
    <GeneratedBy>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </GeneratedBy>
    <GMTOffset>-7</GMTOffset>
  </ExportData>
  <FailureAnalysis>
    <FAID></FAID>
    <Entity>
      <EntityID>1</EntityID>
      <EntityName>XFRACAS Software</EntityName>
    </Entity>
    <Creator>
      <FirstName>Sam</FirstName>
      <LastName>User</LastName>
      <Login>SUSER</Login>
    </Creator>
    <CreateDate>
      <Year>2013</Year>
      <Month>8</Month>
      <Day>1</Day>
      <Hour>22</Hour>
      <Minute>21</Minute>
      <Second>51</Second>
      <FormattedDate>08/01/2013 03:21 PM</FormattedDate>
    </CreateDate>
    <ReportCloseDate />
    <AssociatedProblem>
      <ID>PRR-1</ID>
      <Title>Example Problem</Title>
    </AssociatedProblem>
  </FailureAnalysis>
</FailureAnalyses>
```

```

<AssociatedIncident>
  <ID>Incident-1</ID>
  <Title>Example Incident</Title>
</AssociatedIncident>
<VisualInspectionComments>Not Broken</VisualInspectionComments>
<VisualInspectionDate>
  <Year>2013</Year>
  <Month>9</Month>
  <Day>11</Day>
  <Hour>23</Hour>
  <Minute>37</Minute>
  <Second>0</Second>
  <FormattedDate>09/11/2013 04:37 PM</FormattedDate>
</VisualInspectionDate>
<InitialRepairDate />
<InProgressAnalysisDate />
<CustomerReportSent>No</CustomerReportSent>
<FaultHistory>No faults</FaultHistory>
<RequestWorkOrder>No</RequestWorkOrder>
<SoftwareVersionIn>2.8.0</SoftwareVersionIn>
<SoftwareVersionOut>2.8.1</SoftwareVersionOut>
<RepairReplace PartOrder="2">
  <OldPart>
    <PartID>4</PartID>
    <PartName>Reno</PartName>
    <PartNumber>Reno</PartNumber>
    <PartVersion />
    <RetiredDate />
    <SerialHID>3</SerialHID>
  </OldPart>
  <NewPart>
    <PartID>5</PartID>
    <PartName>Alta</PartName>
    <PartNumber>Alta</PartNumber>
    <PartVersion />
    <RetiredDate />
    <SerialHID>4</SerialHID>
  </NewPart>
  <PartDisposition>
    <Issue />
  </PartDisposition>
  <SalesOrderNumber>23333</SalesOrderNumber>
  <RMANumber>12345</RMANumber>

```

```

<RMAReceivedDate>
  <Year>2013</Year>
  <Month>8</Month>
  <Day>7</Day>
  <Hour>4</Hour>
  <Minute>0</Minute>
  <Second>0</Second>
  <FormattedDate>08/06/2013 09:00 PM</FormattedDate>
</RMAReceivedDate>
<ChangeDate>
  <Year>2013</Year>
  <Month>8</Month>
  <Day>1</Day>
  <Hour>17</Hour>
  <Minute>35</Minute>
  <Second>58</Second>
  <FormattedDate>08/01/2013 10:35 AM</FormattedDate>
</ChangeDate>
<StartingAge>0</StartingAge>
</RepairReplace>
<FailureType>
  <Issue IssueTypeID="23">
    <Description>Collateral Failure</Description>
  </Issue>
</FailureType>
<FAStatus>
  <Issue IssueTypeID="28">
    <Code>1</Code>
    <Description>Open</Description>
  </Issue>
</FAStatus>
<ReturnType>
  <Issue IssueTypeID="26">
    <Code>1</Code>
    <Description>Component Failure</Description>
  </Issue>
</ReturnType>
<Step>1</Step>
<ATPBurnIns>
  <ATPBurnIn>
    <ATPTech>
      <FirstName>Tom</FirstName>
      <LastName>User</LastName>
    </ATPTech>
  </ATPBurnIn>
</ATPBurnIns>

```



```

    <Login>TUSER</Login>
  </ATPTech>
  <ATPDate>
    <Year>2013</Year>
    <Month>9</Month>
    <Day>11</Day>
    <Hour>23</Hour>
    <Minute>39</Minute>
    <Second>0</Second>
    <FormattedDate>09/11/2013 04:39 PM</FormattedDate>
  </ATPDate>
  <FailureAnalysisDescription>Visible failures</FailureAnalysisDescription>
  <TestDuration>3</TestDuration>
  <Result>
    <Issue IssueTypeID="32">
      <Description>Failed</Description>
    </Issue>
  </Result>
</ATPBurnIn>
</ATPBurnIns>
<Actions />
<Details />
<Incident />
</FailureAnalysis>
</FailureAnalyses>

```

FAILURE ANALYSIS ELEMENTS

<FAID>

The FAID element is required.

- If the FAID element value matches an existing failure analysis ID, the failure analysis will *not* be imported.
- If the FAID element value is *not* empty and does *not* match an existing failure analysis ID, the specified FAID element value will be used.
- If the FAID element value is empty, the next available failure analysis ID will be used.

<Entity>

```

<Entity>
  <EntityID />
  <EntityName />
</Entity>

```

The Entity element is required and must contain a valid entity. If the Entity is not valid, the Failure Analysis will *not* be imported.

<Creator>

```
<Creator>
  <FirstName />
  <LastName />
  <Login />
</Creator>
```

The Creator element is required, and the Login element value must match an existing user. If the Creator does not contain a valid User, the failure analysis will *not* be imported.

<CreatedDate>

```
<CreatedDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</CreatedDate>
```

The CreatedDate element is required. If the date entered is not valid, the current date and time will be used.

<AssociatedProblem>

```
<AssociatedProblem>
  <ID />
  <Title />
</AssociatedProblem>
```

The AssociatedProblem element is optional. If present, the ID element value must match an existing problem ID and be associated with the AssociatedIncident.

The Title element value is not used on import. Export only.

<AssociatedIncident>

```
<AssociatedIncident>
  <ID />
  <Title />
</AssociatedIncident>
```

The AssociatedIncident element is optional. If present, the ID element value must match an existing incident ID.

The Title element value is not used on import. Export only.

<VisualInspectionComments>

The VisualInspectionComments (string) element is optional.

<VisualInspectionTech>

```
<VisualInspectionTech>
  <FirstName />
  <LastName />
  <Login />
</VisualInspectionTech>
```

The VisualInspectionTech element is optional and, if present, the Login element value must match an existing user.

<VisualInspectionDate>

```
<VisualInspectionDate>  
  <Year />  
  <Month />  
  <Day />  
  <Hour />  
  <Minute />  
  <Second />  
  <FormattedDate />  
</VisualInspectionDate>
```

The VisualInspectionDate element is optional and, if present, must contain a valid date.

<InitialRepairComments>

The InitialRepairComments (string) element is optional.

<InitialRepairTech>

```
<InitialRepairTech>  
  <FirstName />  
  <LastName />  
  <Login />  
</InitialRepairTech>
```

The InitialRepairTech element is optional and, if present, the Login element value must match an existing user.

<InitialRepairDate>

```
<InitialRepairDate>  
  <Year />  
  <Month />  
  <Day />  
  <Hour />  
  <Minute />  
  <Second />  
  <FormattedDate />  
</InitialRepairDate>
```

The InitialRepairDate element is optional and, if present, must contain a valid date.

<InProcessAnalysisComments>

The InProcessAnalysisComments (string) element is optional.

<InProcessAnalysisTech>

```
<InProcessAnalysisTech>  
  <FirstName />  
  <LastName />  
  <Login />  
</InProcessAnalysisTech>
```

The InProcessAnalysisTech element is optional and, if present, the Login element value must match an existing user.

<InProcessAnalysisDate>

```
<InProcessAnalysisDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</InProcessAnalysisDate>
```

The InProcessAnalysisDate element is optional and, if present, must contain a valid date.

<CustomerReportSent>

The CustomerReportSent element is optional and, if present, its value must be “Yes” or “No,” otherwise it will set be to “No.”

<FaultHistory>

The FaultHistory (string) element is optional.

<SAPItems>

The SAPItems (string) element is optional.

<RequestWorkOrder>

The RequestWorkOrder element is optional and, if present, its value must be “Yes” or “No,” otherwise it will be set to “No.”

<SoftwareVersionIn>

The SoftwareVersionIn (string) element is optional.

<SoftwareVersionOut>

The SoftwareVersionOut (string) element is optional.

<RepairReplace>

See “RepairReplace” in the “Incident Elements” section.

<FailureType>

```
<FailureType>
  <Issue IssueTypeID= >
    <Code />
    <Description />
  </Issue>
</FailureType>
```

The FailureType element is optional and, if present, must contain a valid issue with an IssueTypeID equal to 22 (Incident Failure Type Chargeable) or 23 (Incident Failure Type Non-Chargeable).

<FAStatus>

```
<FAStatus>
  <Issue IssueTypeID= >
    <Code />
    <Description />
  </Issue>
</FAStatus>
```

The FAStatus element is optional. If present, it must contain an existing valid issue with an IssueTypeID equal to 28 (FA Status) or 29 (FA Status Close).

<ReturnType>

```
<ReturnType>
  <Issue IssueTypeID="26">
    <Code />
    <Description />
  </Issue>
</ReturnType>
```

The ReturnType element is optional. If present, it must contain an existing valid issue with an IssueTypeID equal to 26 (FA Customer Return Type).

<ATPBurnIns>

```
<ATPBurnIns>
  <ATPBurnIn />
</ATPBurIns>
```

The ATPBurnIns element is optional. If present, it may contain zero to two ATPBurnIn elements.

<ATPBurnIn>

```
<ATPBurnIn>
  <ATPTech>
    <FirstName />
    <LastName />
    <Login />
  </ATPTech>
  <ATPDate>
    <Year />
    <Month />
    <Day />
    <Hour />
    <Minute />
    <Second />
    <FormattedDate />
  </ATPDate>
  <FailureAnalysisDescription />
  <TestDuration />
  <Result>
    <Issue IssueTypeID="32">
      <Code />
      <Description />
    </Issue>
  </Result>
</ATPBurnIn>
```

The ATPTech element is optional and, if present, the Login element value must match an existing user.

The ATPDate element is optional and, if present, must contain a valid date.

The FailureAnalysisDescription (string) element is optional.

The TestDuration (Decimal) element is optional.

The Result element is required and must contain an existing valid issue with an IssueTypeID equal to 32 (FA ATP Test Result).

<Actions>

See "[Actions.](#)"

<Details>

See "[Details.](#)"

<Incident>

See "[Incidents.](#)"

Template Systems

TEMPLATE SYSTEM XML SAMPLE

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Systems SYSTEM "System.dtd" [ ]>
<Systems xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ExportData>
    <ReportGenerated>09/18/2013 10:40 AM</ReportGenerated>
    <GeneratedBy>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </GeneratedBy>
    <GMTOffset>-7</GMTOffset>
  </ExportData>
  <System>
    <Part>
      <PartName>ReliaSoft Platform</PartName>
      <PartNumber>SYN</PartNumber>
      <PartVersion>9</PartVersion>
      <RetiredDate />
      <UseExisting>Yes</UseExisting>
      <Details />
    </Part>
    <HID>10</HID>
    <Entity>
      <EntityID>1</EntityID>
      <EntityName>XFRACAS Software</EntityName>
    </Entity>
    <CCUsers />
    <SubParts>
      <SubPart>
        <Part>
          <PartName>DFR Suite</PartName>
          <PartNumber>DFR</PartNumber>
          <PartVersion />
          <RetiredDate />
          <UseExisting>Yes</UseExisting>
          <Details />
        </Part>
      </SubPart>
    </SubParts>
  </System>
</Systems>
```

```

<HID>11</HID>
<Entity>
  <EntityID>1</EntityID>
  <EntityName>XFRACAS Software</EntityName>
</Entity>
<CCUsers />
<SubParts>
  <SubPart>
    <Part>
      <PartName>Weibull++</PartName>
      <PartNumber>W</PartNumber>
      <PartVersion>9</PartVersion>
      <RetiredDate />
      <UseExisting>Yes</UseExisting>
      <Details />
    </Part>
  <HID>12</HID>
  <Entity>
    <EntityID>1</EntityID>
    <EntityName>XFRACAS Software</EntityName>
  </Entity>
  <CCUsers />
  <SubParts>
</SubPart>
  <SubPart>
    <Part>
      <PartName>ALTA</PartName>
      <PartNumber>A</PartNumber>
      <PartVersion>9</PartVersion>
      <RetiredDate />
      <UseExisting>Yes</UseExisting>
      <Details />
    </Part>
  <HID>13</HID>
  <Entity>
    <EntityID>1</EntityID>
    <EntityName>XFRACAS Software</EntityName>
  </Entity>
  <CCUsers />
  <SubParts />
</SubPart>
  <SubPart>
    <Part>

```



```

    <PartName>BlockSim</PartName>
    <PartNumber>B</PartNumber>
    <PartVersion>9</PartVersion>
    <RetiredDate />
    <UseExisting>Yes</UseExisting>
    <Details />
  </Part>
  <HID>14</HID>
  <Entity>
    <EntityID>1</EntityID>
    <EntityName>XFRACAS Software</EntityName>
  </Entity>
  <CCUsers />
  <SubParts />
</SubPart>
<SubPart>
  <Part>
    <PartName>XFMEA</PartName>
    <PartNumber>X</PartNumber>
    <PartVersion>9</PartVersion>
    <RetiredDate />
    <UseExisting>Yes</UseExisting>
    <Details />
  </Part>
  <HID>15</HID>
  <Entity>
    <EntityID>1</EntityID>
    <EntityName>XFRACAS Software</EntityName>
  </Entity>
  <CCUsers />
  <PartFailureModes>
    <PartFailureMode>
      <Failure>
        <FailureID>1</FailureID>
        <FailureDescription>Example Failure</FailureDescription>
      </Failure>
      <Causes>
        <Cause>
          <CauseID>1</CauseID>
          <CauseDescription>Example Cause</CauseDescription>
        </Cause>
      </Causes>
    </PartFailureMode>
  </PartFailureModes>

```

```

        </PartFailureModes>
        <SubParts />
    </SubPart>
</SubParts>
</SubPart>
</SubParts>
</System>
</Systems>

```

TEMPLATE SYSTEM ELEMENTS

<Part>

<pre> <System> <Part> <PartName /> <PartNumber /> <PartVersion /> <RetiredDate /> <UseExisting /> <Details /> </Part> </pre>	<p>The Part Element is required and must contain either a new valid part or an existing valid part.</p> <p>The UseExisting element is required and must contain either “Yes” or “No.” When the value is set to “Yes,” if an identical part exists in the same entity, it will be used; otherwise, a new part will be inserted. If the value is set to “No,” a new part will always be inserted.</p> <p>Details - see “Details.”</p>
--	---

To update a Template System, a Subpart element may be added into any SubParts element in the tree.

- Modifying any child element values of a Part element nested in a SubPart element or the top level Part element will cause a part matching the modified part data or a new part to be inserted into the Template System.
- If any part data is modified, the HID element must be removed from that SubPart for the Template System to be imported.
- If the subpart has children, their HID element must be removed for them to be inserted under the above modified SubPart.
- A new Template System will be inserted if the top level part is modified and the HID element is removed. If any child elements have an HID element, the Template System will not be imported.

The Template System cannot update or delete existing parts.

<HID>

The HID element is optional. If present, it must match an existing HID.

<Entity>

<pre> <Entity> <EntityID /> <EntityName /> </Entity> </pre>	<p>The Entity element is required, and must contain an existing valid Entity.</p>
---	---

UNRESTRICTED

<Owner>

```
<Owner>
  <FirstName />
  <LastName />
  <Login />
</Owner>
```

The Owner element is optional. If present, the Login element must match an existing user. This corresponds to the Responsible Engineer.

<CCUsers>

```
<CCUsers>
  <FirstName />
  <LastName />
  <Login />
  <DesigneeOrder />
</CCUsers>
```

The CCUsers element is optional. If present, it must contain valid user data.

An Owner must be present for CCUsers to be inserted. A CCUser element can not contain a DesigneeOrder element with a value equal to 0.

<PartFailureMode>

```
<PartFailureModes>
  <PartFailureMode>
    <Failure>
      <FailureID />
      <FailureDescription />
    </Failure>
    <Causes>
      <Cause>
        <CauseID />
        <CauseDescription />
      </Cause>
    </Causes>
  </PartFailureMode>
</PartFailureModes>
```

The PartFailureMode element is optional. If present, it must contain a Failure element, and may contain zero or more Cause elements.

<SubPart>

```
<SubParts>
  <SubPart />
</SubParts>
</System>
```

The SubPart element is optional. If present, it must contain the above required elements and may contain any of the above optional elements.

Serial Systems

SERIAL SYSTEM XML SAMPLE

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Systems SYSTEM "System.dtd" [ ]>
<Systems xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ExportData>
    <ReportGenerated>09/18/2013 11:02 AM</ReportGenerated>
    <GeneratedBy>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </GeneratedBy>
    <GMTOffset>-7</GMTOffset>
  </ExportData>
  <System>
    <Part>
      <PartName>ReliaSoft Platform</PartName>
      <PartNumber>SYN</PartNumber>
      <PartVersion>9</PartVersion>
      <RetiredDate />
      <UseExisting>Yes</UseExisting>
      <Details />
    </Part>
    <HID>10</HID>
    <SerialHID>20</SerialHID>
    <SerialNumber>123</SerialNumber>
    <Entity>
      <EntityID>1</EntityID>
      <EntityName>XFRACAS Software</EntityName>
    </Entity>
    <BuildDate>
      <Year>2013</Year>
      <Month>9</Month>
      <Day>18</Day>
      <Hour>17</Hour>
      <Minute>59</Minute>
      <Second>0</Second>
      <FormattedDate>09/18/2013 10:59 AM</FormattedDate>
    </BuildDate>
  </System>
</Systems>
```

```

<CumulativeOperatingHours>0</CumulativeOperatingHours>
<StartingAge>0</StartingAge>
<SubParts>
  <SubPart>
    <Part>
      <PartName>DFR Suite</PartName>
      <PartNumber>DFR</PartNumber>
      <PartVersion />
      <RetiredDate />
      <UseExisting>Yes</UseExisting>
      <Details />
    </Part>
    <HID>11</HID>
    <SerialHID>21</SerialHID>
    <SerialNumber>345</SerialNumber>
    <Entity>
      <EntityID>1</EntityID>
      <EntityName>XFRACAS Software</EntityName>
    </Entity>
    <BuildDate>
      <Year>2013</Year>
      <Month>9</Month>
      <Day>18</Day>
      <Hour>17</Hour>
      <Minute>59</Minute>
      <Second>0</Second>
      <FormattedDate>09/18/2013 10:59 AM</FormattedDate>
    </BuildDate>
    <CumulativeOperatingHours>0</CumulativeOperatingHours>
    <StartingAge>0</StartingAge>
    <SubParts>
      <SubPart>
        <Part>
          <PartName>ALTA</PartName>
          <PartNumber>A</PartNumber>
          <PartVersion>9</PartVersion>
          <RetiredDate />
          <UseExisting>Yes</UseExisting>
          <Details />
        </Part>
        <HID>12</HID>
        <SerialHID>22</SerialHID>
        <SerialNumber>A1</SerialNumber>

```

```

<Entity>
  <EntityID>1</EntityID>
  <EntityName>XFRACAS Software</EntityName>
</Entity>
<BuildDate>
  <Year>2013</Year>
  <Month>9</Month>
  <Day>18</Day>
  <Hour>17</Hour>
  <Minute>59</Minute>
  <Second>0</Second>
  <FormattedDate>09/18/2013 10:59 AM</FormattedDate>
</BuildDate>
<CumulativeOperatingHours>0</CumulativeOperatingHours>
<StartingAge>0</StartingAge>
<SubParts />
</SubPart>
<SubPart>
  <Part>
    <PartName>BlockSim</PartName>
    <PartNumber>B</PartNumber>
    <PartVersion>9</PartVersion>
    <RetiredDate />
    <UseExisting>Yes</UseExisting>
    <Details />
  </Part>
  <HID>13</HID>
  <SerialHID>23</SerialHID>
  <SerialNumber>B1</SerialNumber>
  <Entity>
    <EntityID>1</EntityID>
    <EntityName>XFRACAS Software</EntityName>
  </Entity>
  <BuildDate>
    <Year>2013</Year>
    <Month>9</Month>
    <Day>18</Day>
    <Hour>17</Hour>
    <Minute>59</Minute>
    <Second>0</Second>
    <FormattedDate>09/18/2013 10:59 AM</FormattedDate>
  </BuildDate>
  <CumulativeOperatingHours>0</CumulativeOperatingHours>

```

```

    <StartingAge>0</StartingAge>
    <SubParts />
</SubPart>
<SubPart>
  <Part>
    <PartName>Weibull++</PartName>
    <PartNumber>W</PartNumber>
    <PartVersion>9</PartVersion>
    <RetiredDate />
    <UseExisting>Yes</UseExisting>
    <Details />
  </Part>
  <HID>14</HID>
  <SerialHID>24</SerialHID>
  <SerialNumber>W1</SerialNumber>
  <Entity>
    <EntityID>1</EntityID>
    <EntityName>XFRACAS Software</EntityName>
  </Entity>
  <BuildDate>
    <Year>2013</Year>
    <Month>9</Month>
    <Day>18</Day>
    <Hour>17</Hour>
    <Minute>59</Minute>
    <Second>0</Second>
    <FormattedDate>09/18/2013 10:59 AM</FormattedDate>
  </BuildDate>
  <CumulativeOperatingHours>0</CumulativeOperatingHours>
  <StartingAge>0</StartingAge>
  <SubParts />
</SubPart>
<SubPart>
  <Part>
    <PartName>XFMEA</PartName>
    <PartNumber>X</PartNumber>
    <PartVersion>9</PartVersion>
    <RetiredDate />
    <UseExisting>Yes</UseExisting>
    <Details />
  </Part>
  <HID>15</HID>
  <SerialHID>25</SerialHID>

```



```

<SerialNumber>X1</SerialNumber>
<Entity>
  <EntityID>1</EntityID>
  <EntityName>XFRACAS Software</EntityName>
</Entity>
<BuildDate>
  <Year>2013</Year>
  <Month>9</Month>
  <Day>18</Day>
  <Hour>17</Hour>
  <Minute>59</Minute>
  <Second>0</Second>
  <FormattedDate>09/18/2013 10:59 AM</FormattedDate>
</BuildDate>
<CumulativeOperatingHours>0</CumulativeOperatingHours>
<StartingAge>0</StartingAge>
<SubParts />
</SubPart>
</SubParts>
</SubPart>
</SubParts>
</System>
</Systems>

```

SERIAL SYSTEM ELEMENTS

<Part>

<pre> <Part> <PartName /> <PartNumber /> <PartVersion /> <RetiredDate /> <UseExisting /> <Details /> </Part> </pre>	<p>The Part element is required and must contain either a new valid part or an existing valid part.</p> <p>The UseExisting element is required and must contain either “Yes” or “No.” When the value is set to “Yes,” if an identical part exists in the same entity, it will be used; otherwise, a new part will be inserted. If the value is set to “No,” a new part will always be inserted.</p> <p>Details – see “Details.”</p>
---	---

To update a Serial System, a subpart may be added to any SubParts element in the tree.

- Modifying any child element values of a Part element nested in a SubPart element or the top-level Part element will cause a part matching the modified part data or a new part to be inserted into the Serial System.
- If any part data is modified, the HID and SerialHID element must be removed for the Serial System to be imported. If the SubPart element has child SubPart elements, their HID and SerialHID elements must be removed for them to be inserted under the above modified subpart.

- If only the serial data of the SubPart is modified, only the SerialHID element needs to be removed.
- A new Serial System will be inserted if the top level part is modified and the HID and SerialHID elements are removed. For a new Serial System to be inserted, each child SubPart cannot have HID or SerialHID elements.

The Serial System import cannot update or delete existing parts.

<HID >

The HID element is optional. If present, it must match an existing HID.

<SerialHID >

The SerialHID element is optional. If present, it must match an existing SerialHID.

<SerialNumber >

The SerialNumber (string) element is required at top level but optional at levels other than the top.

<Entity>

```
<Entity>
  <EntityID />
  <EntityName />
</Entity>
```

The Entity element is required, and must contain a valid Entity.

<BuildDate>

```
<BuildDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</BuildDate>
```

The BuildDate element is optional. If present, it must contain a valid date.

<ShipDate>

```
<ShipDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</ShipDate>
```

The ShipDate element is optional. If present, it must contain a valid date.

<RetiredDate>

```
<RetiredDate>  
  <Year />  
  <Month />  
  <Day />  
  <Hour />  
  <Minute />  
  <Second />  
  <FormattedDate />  
</RetiredDate>
```

The RetiredDate element is optional. If present, it must contain a valid date.

<ManufacturedCode >

The ManufacturedCode (string) element is optional.

<StartingAge>

The StartingAge (integer) element is optional.

<LotCode>

The LotCode (string) element is optional.

<SubPart >

```
<SubParts>  
  <SubPart />  
<SubParts>  
</System>
```

The SubPart element is optional. If present, it must contain the above-required elements and may contain any of the above optional elements.

Addresses

ADDRESS XML SAMPLE

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Addresses SYSTEM "Address.dtd"[]>
<Addresses xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ExportData>
    <ReportGenerated>09/20/2013 11:49 AM</ReportGenerated>
    <GeneratedBy>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </GeneratedBy>
    <GMTOffset>-7</GMTOffset>
  </ExportData>
  <Address>
    <AddressLine1>1450 S. Eastside Loop</AddressLine1>
    <City>Tucson</City>
    <State>Arizona</State>
    <StateAbbrev>AZ</StateAbbrev>
    <Country>United States</Country>
    <ZipCode>85710</ZipCode>
    <Location>ReliaSoft</Location>
    <Details />
  </Address>
</Addresses>
```

ADDRESS ELEMENTS

<AddressLine1>

The AddressLine1 (string) element is optional.

<AddressLine2>

The AddressLine2 (string) element is optional.

<City>

The City (string) element is optional. The value must match an existing city. An invalid City entry will be replaced by NULL.

<State>

The State (string) element is optional. An invalid State entry will be replaced by NULL.

<StateAbbrev>

The StateAbbrev element is optional. It must be a standard two letter state code.

<Country>

The Country (string) element is optional. The value must match an existing country. An invalid Country entry will be replaced by NULL.

<ZipCode>

The ZipCode (integer) element is optional. The value must match an existing zip code. An invalid ZipCode entry will be replaced by NULL.

<Location >

The Location (string) element is required, and must NOT match an existing location.

<Entity>

```
<Entity>  
  <EntityID />  
  <EntityName />  
</Entity>
```

The Entity element is optional. If present, it must contain a valid entity. The Entity element is only used to supply entity data for importing details.

<Details>

Details – see “[Details.](#)”

Companies

COMPANY XML SAMPLE

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Companies SYSTEM "Company.dtd" [ ]>
<Companies xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ExportData>
    <ReportGenerated>09/17/2013 05:01 PM</ReportGenerated>
    <GeneratedBy>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </GeneratedBy>
    <GMTOffset>-7</GMTOffset>
  </ExportData>
  <Company>
    <CompanyName>ReliaSoft Corporation</CompanyName>
    <Phone>520-555-5555</Phone>
    <Phone2 />
    <Fax />
    <SalesRegion />
    <WarrantyMonthShip>15</WarrantyMonthShip>
    <WarrantyMonthCommission>12</WarrantyMonthCommission>
    <WarrantyCalcMethod>1</WarrantyCalcMethod>
    <Entity>
      <EntityID>1</EntityID>
      <EntityName>XFRACAS Software</EntityName>
    </Entity>
    <Addresses>
      <Address>
        <AddressLine1>1450 S. Eastside Loop</AddressLine1>
        <AddressLine2 />
        <City>Tucson</City>
        <State>Arizona</State>
        <Country>United States</Country>
        <ZipCode>85710</ZipCode>
        <Location>ReliaSoft Corporate</Location>
      </Address>
    </Addresses>
    <Categories>
```

```

<Category>
  <CategoryID>6</CategoryID>
  <CategoryName>Owner</CategoryName>
</Category>
<Category>
  <CategoryID>9</CategoryID>
  <CategoryName>Authorized Service Provider</CategoryName>
</Category>
<Category>
  <CategoryID>14</CategoryID>
  <CategoryName>Distributor</CategoryName>
</Category>
</Categories>
<Details />
</Company>
</Companies>

```

COMPANY ELEMENTS

<CompanyName>

The CompanyName element is required, and its value must **NOT** match any other existing company name.

<Phone>, <Phone2>, <Fax>

The Phone (string), Phone2 (string) and Fax (string) elements are optional.

<SalesRegion>

```

<SalesRegion>
  <Issue IssueTypeID="33">
    <Code />
    <Description />
  </Issue>
</SalesRegion>

```

The SalesRegion element is optional and, if present, must contain an existing valid issue with an IssueTypeID equal to 33 (Company Sales Region).

<WarrantyMonthShip>

The WarrantyMonthShip (integer) element is optional.

<WarrantyMonthCommission>

The WarrantyMonthCommission (integer) element is optional.

<WarrantyCalcMethod>

The WarrantyCalcMethod (integer) element is optional.

<Entity>

```
<Entity>  
  <EntityID />  
  <EntityName />  
</Entity>
```

The Entity element is optional and, if present, must contain a valid entity.
The Entity element is only used to supply entity data for importing details.

<Address>

```
<Addresses>  
  <Address>  
    <City />  
    <State />  
    <Country />  
    <ZipCode />  
    <Location />  
  </Address>  
</Addresses>
```

The Address element is optional and, if present, must contain a Location element value that matches an existing address location.

<Categories>

```
<Categories>  
  <Category>  
    <CategoryID />  
    <CategoryName />  
  </Category>  
</Categories>
```

The Categories element is required and must contain one or more Category element.

The Category element must contain a CategoryName element whose value matches an existing company category.

<Details>

Details – see “[Details](#).”

Issues

ISSUE XML SAMPLE

```

<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Issues SYSTEM "Issue.dtd" [ ]>
<Issues xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ExportData>
    <ReportGenerated>09/18/2013 11:41 AM</ReportGenerated>
    <GeneratedBy>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </GeneratedBy>
    <GMTOffset>-7</GMTOffset>
  </ExportData>
  <Issue>
    <Code>01</Code>
    <Description>Define - Define the Team</Description>
    <IssueType>
      <IssueTypeId>6</IssueTypeId>
      <IssueTypeDescription>PRR Status</IssueTypeDescription>
    </IssueType>
    <IssueDate>
      <Year>2000</Year>
      <Month>11</Month>
      <Day>17</Day>
      <Hour>17</Hour>
      <Minute>53</Minute>
      <Second>23</Second>
      <FormattedDate>11/17/2000 10:53 AM</FormattedDate>
    </IssueDate>
    <Retired />
    <Amount>0</Amount>
    <Quantity>0</Quantity>
  </Issue>
  <Issue>
    <Code>02</Code>
    <Description>Describe the Problem</Description>
    <IssueType>
      <IssueTypeId>6</IssueTypeId>

```

```

    <IssueTypeDescription>PRR Status</IssueTypeDescription>
  </IssueType>
  <IssueDate>
    <Year>2000</Year>
    <Month>11</Month>
    <Day>17</Day>
    <Hour>17</Hour>
    <Minute>53</Minute>
    <Second>31</Second>
    <FormattedDate>11/17/2000 10:53 AM</FormattedDate>
  </IssueDate>
  <Retired />
  <Amount>0</Amount>
  <Quantity>0</Quantity>
</Issue>
<Issue>
  <Code>03</Code>
  <Description>Develop Containment</Description>
  <IssueType>
    <IssueTypeId>6</IssueTypeId>
    <IssueTypeDescription>PRR Status</IssueTypeDescription>
  </IssueType>
  <IssueDate>
    <Year>2000</Year>
    <Month>11</Month>
    <Day>17</Day>
    <Hour>17</Hour>
    <Minute>53</Minute>
    <Second>41</Second>
    <FormattedDate>11/17/2000 10:53 AM</FormattedDate>
  </IssueDate>
  <Retired />
  <Amount>0</Amount>
  <Quantity>0</Quantity>
</Issue>
<Issue>
  <Code>04</Code>
  <Description>Define and Verify Root Cause</Description>
  <IssueType>
    <IssueTypeId>6</IssueTypeId>
    <IssueTypeDescription>PRR Status</IssueTypeDescription>
  </IssueType>
  <IssueDate>

```

```
<Year>2000</Year>
<Month>11</Month>
<Day>17</Day>
<Hour>17</Hour>
<Minute>53</Minute>
<Second>47</Second>
<FormattedDate>11/17/2000 10:53 AM</FormattedDate>
</IssueDate>
<Retired />
<Amount>0</Amount>
<Quantity>0</Quantity>
</Issue>
<Issue>
  <Code>05</Code>
  <Description>Determine Corrective Action(s)</Description>
  <IssueType>
    <IssueTypeId>6</IssueTypeId>
    <IssueTypeDescription>PRR Status</IssueTypeDescription>
  </IssueType>
  <IssueDate>
    <Year>2001</Year>
    <Month>1</Month>
    <Day>11</Day>
    <Hour>15</Hour>
    <Minute>59</Minute>
    <Second>8</Second>
    <FormattedDate>01/11/2001 08:59 AM</FormattedDate>
  </IssueDate>
  <Retired />
  <Amount>0</Amount>
  <Quantity>0</Quantity>
</Issue>
<Issue>
  <Code>06</Code>
  <Description>Verify Corrective Action(s)</Description>
  <IssueType>
    <IssueTypeId>6</IssueTypeId>
    <IssueTypeDescription>PRR Status</IssueTypeDescription>
  </IssueType>
  <IssueDate>
    <Year>2003</Year>
    <Month>3</Month>
    <Day>20</Day>
```

```

    <Hour>2</Hour>
    <Minute>24</Minute>
    <Second>27</Second>
    <FormattedDate>03/19/2003 07:24 PM</FormattedDate>
  </IssueDate>
  <Retired />
  <Amount>0</Amount>
  <Quantity>0</Quantity>
</Issue>
<Issue>
  <Code>07</Code>
  <Description>Prevent Recurrence</Description>
  <IssueType>
    <IssueTypeId>6</IssueTypeId>
    <IssueTypeDescription>PRR Status</IssueTypeDescription>
  </IssueType>
  <IssueDate>
    <Year>2003</Year>
    <Month>3</Month>
    <Day>20</Day>
    <Hour>2</Hour>
    <Minute>24</Minute>
    <Second>27</Second>
    <FormattedDate>03/19/2003 07:24 PM</FormattedDate>
  </IssueDate>
  <Retired />
  <Amount>0</Amount>
  <Quantity>0</Quantity>
</Issue>
<Issue>
  <Code>08</Code>
  <Description>Additional Comments</Description>
  <IssueType>
    <IssueTypeId>6</IssueTypeId>
    <IssueTypeDescription>PRR Status</IssueTypeDescription>
  </IssueType>
  <IssueDate>
    <Year>2003</Year>
    <Month>3</Month>
    <Day>20</Day>
    <Hour>2</Hour>
    <Minute>24</Minute>
    <Second>27</Second>
  </IssueDate>

```

UNRESTRICTED

```

    <FormattedDate>03/19/2003 07:24 PM</FormattedDate>
  </IssueDate>
  <Retired />
  <Amount>0</Amount>
  <Quantity>0</Quantity>
</Issue>
</Issues>

```

ISSUE ELEMENTS

<Code>

The Code (string) element is optional.

<Description>

The Description (string) element is required.

<IssueType>

```

<IssueType>
  <IssueTypeId />
  <IssueTypeDescription />
</IssueType>

```

The IssueType element is required. It must contain an IssueTypeId and IssueTypeDescription elements that both match an existing issue type.

<IssueDate>

```

<IssueDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</IssueDate>

```

The IssueDate element is required. If the date entered is not valid, the current date and time will be used.

<Retired>

```

<Retired>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</Retired>

```

The Retired element is optional. It must be a valid date.

<Amount>

The Amount (decimal) element is optional.

<Quantity>

The Quantity (integer) element is optional.

Master Bill of Materials (MasterBOMs)

MASTERBOM XML SAMPLE

```

<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE MasterBOMs SYSTEM "MasterBOM.dtd"[]>
<MasterBOMs xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ExportData>
    <ReportGenerated>09/18/2013 01:18 PM</ReportGenerated>
    <GeneratedBy>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </GeneratedBy>
    <GMTOffset>-7</GMTOffset>
  </ExportData>
  <MasterBOM>
    <Entity>
      <EntityID>1</EntityID>
      <EntityName>XFRACAS Software</EntityName>
    </Entity>
    <Parts>
      <Part>
        <PartID>100</PartID>
        <PartName>ReliaSoft Platform</PartName>
        <PartNumber>SYN</PartNumber>
        <PartVersion>9</PartVersion>
        <CreatedDate>
          <Year>2013</Year>
          <Month>9</Month>
          <Day>18</Day>
          <Hour>15</Hour>
          <Minute>39</Minute>
          <Second>26</Second>
          <FormattedDate>09/18/2013 08:39 AM</FormattedDate>
        </CreatedDate>
        <RetiredDate />
        <Details />
      </Part>
      <Part>
        <PartID>101</PartID>

```

```

<PartName>DFR Suite</PartName>
<PartNumber>DFR</PartNumber>
<PartVersion />
<CreatedDate>
  <Year>2013</Year>
  <Month>9</Month>
  <Day>18</Day>
  <Hour>15</Hour>
  <Minute>40</Minute>
  <Second>2</Second>
  <FormattedDate>09/18/2013 08:40 AM</FormattedDate>
</CreatedDate>
<RetiredDate />
<Details />
</Part>
<Part>
  <PartID>102</PartID>
  <PartName>Weibull++</PartName>
  <PartNumber>W</PartNumber>
  <PartVersion>9</PartVersion>
  <CreatedDate>
    <Year>2013</Year>
    <Month>9</Month>
    <Day>18</Day>
    <Hour>15</Hour>
    <Minute>40</Minute>
    <Second>25</Second>
    <FormattedDate>09/18/2013 08:40 AM</FormattedDate>
  </CreatedDate>
  <RetiredDate />
  <Details />
</Part>
<Part>
  <PartID>103</PartID>
  <PartName>ALTA</PartName>
  <PartNumber>A</PartNumber>
  <PartVersion>9</PartVersion>
  <CreatedDate>
    <Year>2013</Year>
    <Month>9</Month>
    <Day>18</Day>
    <Hour>15</Hour>
    <Minute>45</Minute>

```



```

    <Second>13</Second>
    <FormattedDate>09/18/2013 08:45 AM</FormattedDate>
  </CreatedDate>
  <RetiredDate />
  <Details />
</Part>
<Part>
  <PartID>104</PartID>
  <PartName>BlockSim</PartName>
  <PartNumber>B</PartNumber>
  <PartVersion>9</PartVersion>
  <CreatedDate>
    <Year>2013</Year>
    <Month>9</Month>
    <Day>18</Day>
    <Hour>15</Hour>
    <Minute>45</Minute>
    <Second>29</Second>
    <FormattedDate>09/18/2013 08:45 AM</FormattedDate>
  </CreatedDate>
  <RetiredDate />
  <Details />
</Part>
<Part>
  <PartID>105</PartID>
  <PartName>XFMEA</PartName>
  <PartNumber>X</PartNumber>
  <PartVersion>9</PartVersion>
  <CreatedDate>
    <Year>2013</Year>
    <Month>9</Month>
    <Day>18</Day>
    <Hour>16</Hour>
    <Minute>5</Minute>
    <Second>27</Second>
    <FormattedDate>09/18/2013 09:05 AM</FormattedDate>
  </CreatedDate>
  <RetiredDate />
  <Detail />
</Part>
</Parts>
</MasterBOM>
</MasterBOMs>

```

UNRESTRICTED

MASTERBOM ELEMENTS

<Entity>

```

<Entity>
  <EntityID />
  <EntityName />
</Entity>

```

The Entity element is required and must contain a valid entity.

<Parts>

```

<Parts>
  <Part>
    <PartID />
    <PartName />
    <PartNumber />
    <PartVersion />
    <CreatedDate>
      <Year />
      <Month />
      <Day />
      <Hour />
      <Minute />
      <Second />
      <FormattedDate />
    </CreatedDate>
    <RetiredDate>
      <Year />
      <Month />
      <Day />
      <Hour />
      <Minute />
      <Second />
      <FormattedDate />
    </RetiredDate>
    <Details />
  </Part>
</Parts>

```

The Parts element is required and must contain one or more Part elements.

To update a part, the PartID element value must match an existing part ID, and the value of any of the following elements can be different than the existing value to get updated: PartName, PartNumber, PartVersion, CreatedDate and RetiredDate.

<Details>

Details – see “[Details.](#)”

Users

USER XML SAMPLE

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE Users SYSTEM "User.dtd" []>
<Users xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <ExportData>
    <ReportGenerated>09/18/2013 03:30 PM</ReportGenerated>
    <GeneratedBy>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </GeneratedBy>
    <GMTOffset>-7</GMTOffset>
  </ExportData>
  <User>
    <Credentials>
      <FirstName>Sam</FirstName>
      <LastName>User</LastName>
      <Login>SUSER</Login>
    </Credentials>
    <Locale>
      <City>Tucson</City>
      <State>Arizona</State>
      <Country>United States</Country>
    </Locale>
    <EmployeeID />
    <Email>SUSER@EXAMPLE.COM</Email>
    <DefaultEntity>
      <EntityID>1</EntityID>
      <EntityName>XFRACAS Software</EntityName>
    </DefaultEntity>
    <CreatedDate>
      <Year>2003</Year>
      <Month>11</Month>
      <Day>6</Day>
      <Hour>20</Hour>
      <Minute>55</Minute>
      <Second>3</Second>
      <FormattedDate>11/06/2003 01:55 PM</FormattedDate>
  </User>
</Users>
```

```

</CreateDate>
<ExpirationDate />
<RevokeDate />
<UserEntities>
  <UserEntity>
    <Entity>
      <EntityID>1</EntityID>
      <EntityName>XFRACAS Software</EntityName>
    </Entity>
    <AccountExpirationDate />
    <CreateDate>
      <Year>2003</Year>
      <Month>11</Month>
      <Day>6</Day>
      <Hour>20</Hour>
      <Minute>55</Minute>
      <Second>3</Second>
      <FormattedDate>11/06/2003 01:55 PM</FormattedDate>
    </CreateDate>
    <RetiredDate />
    <ReportingOrg>
      <Issue IssueTypeID="56">
        <Description>Development</Description>
      </Issue>
    </ReportingOrg>
    <ParentUser />
    <Groups>
      <Group>
        <GroupID>3</GroupID>
        <GroupName>USER</GroupName>
        <GroupDescription>STANDARD END USER</GroupDescription>
      </Group>
    </Groups>
    <UserPermissions>
      <UserPermission>
        <PermissionID>87</PermissionID>
        <PermissionDescription>Reports - Serialized System Search
          Enabled</PermissionDescription>
      </UserPermission>
    </UserPermissions>
  </UserEntity>
</UserEntities>
</User>

```

</Users>

USER ELEMENTS

<Credentials>

<Credentials>	The Credential element is required.
<FirstName />	The FirstName and LastName elements are required.
<MiddleName />	The MiddleName element is optional.
<LastName />	The MiddleName element is optional.
<Login />	The Login element is required and its value must NOT match an existing login.
</Credentials>	

<Locale>

<Locale>	The Locale element is optional. If present, it may contain any of the following elements: City (City Name), State (State Name) and Country (Country Name).
<City />	
<State />	
<Country />	
</Locale>	

<EmployeeID>

The EmployeeID element is optional.

<Email>

The Email element is required.

<DefaultEntity>

<DefaultEntity>	The DefaultEntity element is required and must contain a valid entity
<EntityID />	
<EntityName />	
</DefaultEntity>	

<CreatedDate>

<CreatedDate>	The CreatedDate element is required. If the date entered is not valid the current date and time will be used.
<Year />	
<Month />	
<Day />	
<Hour />	
<Minute />	
<Second />	
<FormattedDate />	
</CreatedDate>	

<ExpirationDate>

```
<ExpirationDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</ExpirationDate>
```

The ExpirationDate element is optional and, if present, must be a valid date.

<RevokeDate>

```
<RevokeDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</RevokeDate>
```

The RevokeDate element is optional and, if present, must be a valid date.

<UserEntity>

```
<UserEntities>
  <UserEntity>
    <Entity>
      <EntityID />
      <EntityName />
    </Entity>
```

The UserEntity element is optional and, if present, must contain a valid entity.

<AccountExpirationDate>

```
<AccountExpirationDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</AccountExpirationDate>
```

The AccountExpirationDate is optional and, if present, must contain a valid date.

<CreatedDate>

```
<CreatedDate>
  <Year />
  <Month />
  <Day />
```

The CreatedDate element is required. If the date entered is not valid, the current date and time will be used.

```
<Hour />
<Minute />
<Second />
<FormattedDate />
</CreatedDate>
```

<RetiredDate>

```
<RetiredDate>
  <Year />
  <Month />
  <Day />
  <Hour />
  <Minute />
  <Second />
  <FormattedDate />
</RetiredDate>
```

The RetiredDate is optional and, if present, must contain a valid date.

<ReportingOrg>

```
<ReportingOrg>
  <Issue IssueTypeID= >
    <Code />
    <Description />
  </Issue>
</ReportingOrg>
```

The ReportingOrg element is optional. As of version 10.1, if it is present, and its contents are not equal to a valid existing issue with an IssueTypeID equal to 56 (Reporting Organization), then its contents will be added as a new issue of that type. In previous versions, the issue had to exist already; new issues were not added.

<ParentUser>

```
<ParentUser>
  <FirstName />
  <MiddleName />
  <LastName />
  <Login />
</ParentUser>
```

The ParentUser element is optional. If present, it must contain a Login element whose value matches an existing login.

<Group>

```
<Groups>
  <Group>
    <GroupName />
    <GroupDescription />
  </Group>
</Groups>
```

The Group element is optional. If present, the GroupName element value must match an existing user group name.

<Categories>

```
<Categories>
  <Category>
    <UserCategoryID />
    <UserCategoryName />
  </Category>
</Categories>
```

The Categories element is optional. If present, the UserCategoryName element must match an existing user category or one that was created by the user within the application. Standard user categories include:

ID	Category Name
2	FA Engineer
3	Default PRR Reviewe
4	Legal Exper
5	D2 Approve
6	D3 Approve
7	D4 Approve
8	D5 Approver
9	D6 Approver
10	D7 Approver
11	Problem Owner
12	D8 Approver
13	Project Owner

<UserPermissions>

```
<UserPermissions>
  <UserPermission>
    <PermissionID />
    <PermissionDescription/>
  </UserPermission>
</UserPermissions>
```

The UserPermissions element is optional. If present, the PermissionID element or the PermissionDescription element must match an existing permission. The PermissionID is checked first.

Criticality

Criticality elements may be used in imports for Incidents and Problems.

CRITICALITY XML SAMPLE

```

<Criticalities>
  <Criticality>
    <SelectedCriticalityIssue>
      <Issue IssueTypeID="1013">
        <Code>1</Code>
        <Description>Value 1</Description>
      </Issue>
    </SelectedCriticalityIssue>
    <CriticalityType>
      <CritTypeName>Test Criticality</CritTypeName>
      <CritTypeDescription>Criticality Description</CritTypeDescription>
    </CriticalityType>
    <CriticalityStep>1</CriticalityStep>
    <CriticalityDisplayOrder>2</CriticalityDisplayOrder>
  </Criticality>
</Criticalities>

```

CRITICALITY ELEMENTS

<Criticalities>

```

<Criticalities>
  <Criticality />
</Criticalities>

```

The Criticalities element is optional and may contain zero or more Criticality elements. The Criticality element is optional.

<SelectedCriticalityIssue>

```

<SelectedCriticalityIssue>
  <Issue IssueTypeID= >
    <Code />
    <Description />
  </Issue>
</SelectedCriticalityIssue>

```

The SelectedCriticalityIssue element is required and must contain an existing valid issue.

<CriticalityType>

```
<CriticalityType>  
  <CritTypeName />  
  <CritTypeDescription />  
</CriticalityType>
```

The CriticalityType element is required. It must contain an existing criticality type. (CritTypeName is minimum required. Combination of CritTypeName and CritTypeDescription must match a criticality type.)

<CriticalityStep>

The CriticalityStep (integer) element is optional

<CriticalityDisplayOrder>

The CriticalityDisplayOrder (integer) element is optional.

Team Members

Team member elements may be used in imports for Incidents, Problems and Projects.

TEAM MEMBERS XML SAMPLE

```

<TeamMembers>
  <TeamMember>
    <MemberUser>
      <FirstName>Bob</FirstName>
      <LastName>User</LastName>
      <Login>BUSER</Login>
    </MemberUser>
    <MemberRole>
      <Issue IssueTypeID="50">
        <Description>Software Engineer</Description>
      </Issue>
    </MemberRole>
  </TeamMember>
  <TeamMember>
    <MemberUser>
      <FirstName>Sam</FirstName>
      <LastName>User</LastName>
      <Login>SUSER</Login>
    </MemberUser>
    <MemberRole>
      <Issue IssueTypeID="50">
        <Description>Project Lead</Description>
      </Issue>
    </MemberRole>
  </TeamMember>
</TeamMembers>

```

TEAM MEMBERS ELEMENTS

<TeamMembers>

```

<TeamMembers>
  <TeamMember />
</TeamMembers>

```

The TeamMembers element is optional and it may contain zero or more TeamMember elements.

<TeamMember>

The TeamMember element is optional.

Update (Incident): A team member will be updated if the MemberUser matches an original team member MemberUser and the MemberRole differs.

- If the UpdateOnly setting is disabled, team members that do not have a corresponding original team member will be inserted. The member user must be unique across team members.
- If the UpdateOnly setting is enabled and no original team members are found, no new team members will be inserted.

<MemberUser>

```
<MemberUser>  
  <FirstName />  
  <LastName />  
  <Login />  
</MemberUser>
```

The MemberUser element is required, and the Login element value must match an existing user.

<MemberRole>

```
<MemberRole>  
  <Issue IssueTypeID="50">  
    <Code />  
    <Description />  
  </Issue>  
</MemberRole>
```

The MemberRole element is required, and must be a valid existing issue with an IssueTypeID equal to 50 (Team Member Role).

Actions

Action elements may be used in imports for Incidents, Problems, Customer Support Records, Projects and Failure Analysis Reports.

ACTION XML SAMPLE

```

<Actions>
  <Action>
    <ActionID>2</ActionID>
    <ActionType>
      <ActionTypeID>8</ActionTypeID>
      <Description>Incident Action</Description>
    </ActionType>
    <AssignedType>
      <AssignedID>1</AssignedID>
      <Description>Incident</Description>
    </AssignedType>
    <ActionDescription>Test Action</ActionDescription>
    <ActionResult>action results here</ActionResult>
    <DueDate>
      <Year>2013</Year>
      <Month>8</Month>
      <Day>9</Day>
      <Hour>7</Hour>
      <Minute>0</Minute>
      <Second>0</Second>
      <FormattedDate>08/09/2013 12:00 AM</FormattedDate>
    </DueDate>
    <ActionOwner>
      <FirstName>Joe</FirstName>
      <LastName>User</LastName>
      <Login>JUSER</Login>
    </ActionOwner>
    <StartDate>
      <Year>2013</Year>
      <Month>8</Month>
      <Day>1</Day>
      <Hour>22</Hour>
      <Minute>45</Minute>
      <Second>7</Second>
      <FormattedDate>08/01/2013 03:45 PM</FormattedDate>
  </Action>

```

```

</StartDate>
<CompleteDate>
  <Year>2013</Year>
  <Month>8</Month>
  <Day>1</Day>
  <Hour>22</Hour>
  <Minute>46</Minute>
  <Second>8</Second>
  <FormattedDate>08/01/2013 03:46 PM</FormattedDate>
</CompleteDate>
<SentEmailNoticeDate />
<Creator>
  <FirstName>Sam</FirstName>
  <LastName>User</LastName>
  <Login>SUSER</Login>
</Creator>
<Details />
</Action>
</Actions>

```

ACTION ELEMENTS

<Actions>

```

<Actions>
  <Action />
</Actions>

```

The Actions element is optional and it may contain zero or more Action elements

<ActionType>

```

<ActionType>
  <ActionTypeID />
  <Description />
</ActionType>

```

The ActionType element is required and must contain either an ActionTypeID or Description element.

The combination of the ActionTypeID and/or Description values must match an existing Action Type. Standard Action Types include:

ID	Description
1	Problem Description
2	Containment Description
3	Root Cause Analysis
4	Root Cause Verification
5	Corrective
6	Implementation
7	Prevent Recurrence
8	Incident Action
9	Project Action

- 10 Failure Analysis Action
- 11 CSI Action

Update (Incident): An action will be updated if its ActionID matches an original ActionID and if any of the following values differ from the original:

- ActionType
- ActionDescription
- ActionResult
- DueDate
- Owner
- StartDate
- CompleteDate
- SentEmailNoticeDate
- Creator

If the ActionID does not match an original ActionID, UpdateOnly is disabled and the action will be inserted if it is valid.

<AssignedType>

`<AssignedType>` The AssignedType element is optional. Export only.
`<AssignedID />`
`<Description />`
`</AssignedType>`

<ActionDescription>

The ActionDescription element is required. Maximum of 2000 characters allowed.

<ActionResult>

The ActionResult element is optional. Maximum of 2000 characters allowed.

<DueDate>

`<DueDate>` The DueDate element is required and must contain a valid date.
`<Year />`
`<Month />`
`<Day />`
`<Hour />`
`<Minute />`
`<Second />`
`<FormattedDate />`
`</DueDate>`

<ActionOwner>

```
<ActionOwner>  
  <FirstName />  
  <LastName />  
  <Login />  
</ActionOwner>
```

The ActionOwner element is required. The Login element value must match an existing valid user.

<StartDate>

```
<StartDate>  
  <Year />  
  <Month />  
  <Day />  
  <Hour />  
  <Minute />  
  <Second />  
  <FormattedDate />  
</StartDate>
```

The StartDate element is required and must contain a valid date.

<CompleteDate>

```
<CompleteDate>  
  <Year />  
  <Month />  
  <Day />  
  <Hour />  
  <Minute />  
  <Second />  
  <FormattedDate />  
</CompleteDate>
```

The CompleteDate element is optional and, if present, must contain a valid date.

<SentEmailNoticeDate>

```
<SentEmailNoticeDate>  
  <Year />  
  <Month />  
  <Day />  
  <Hour />  
  <Minute />  
  <Second />  
  <FormattedDate />  
</SentEmailNoticeDate>
```

The SentEmailNoticeDate element is optional and, if present, must contain a valid date.

<Creator>

```
<Creator>  
  <FirstName />  
  <LastName />  
  <Login />  
</Creator>
```

The Creator element is required. The Login element value must match an existing valid user.

Details

Detail elements may be used in imports for [Incidents](#), [Problems](#), [Customer Support Records](#), [Projects](#), [Failure Analysis Reports](#), [Template Systems](#), [Serial Systems](#), [Master Bill of Materials \(MasterBOMs\)](#), [Addresses](#) and [Companies](#). Common detail elements include:

- **<DetailTypeID>** - required; must match an existing detail type
- **<DisplayOrder>** - optional; export only
- **<DetailStep>** - optional; export only
- **<DetailSpan>** - optional; export only
- **<DetailUIType>** - optional; export only
- **<DetailName>** - optional

Update information is provided here for each detail type.

- Note that, when UpdateDetails is “Yes” and UpdateOnly is “No,” the behavior is as described; however, only existing values will be modified or deleted (values will not be added to empty fields).
- In addition, incident records require that EnableUpdate and UpdateDetails are set to “Yes” and that the IncidentID matches an existing record.

See “[Import Configuration](#)” for more information about EnableUpdate and UpdateOnly.

ALPHANUMERIC INPUT BOX DETAIL

DetailUIType: TextFieldAlphaNumericDetail

The **Value** (string) element is required. Maximum of 255 characters allowed.

XML example

```

<Detail>
  <DetailTypeID>100</DetailTypeID>
  <DisplayOrder>8</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>TextFieldAlphaNumericDetail</DetailUIType>
  <DetailName>Example Alpha Numeric Detail</DetailName>
  <AlphaNumeric>
    <Value>Example text</Value>
  </AlphaNumeric>
</Detail>

```

Update

- **Delete:** The detail value will be deleted if the Value element is empty or not present.

- **Update:** The detail will be updated if the Value element's value has been modified.

NUMERIC DETAIL

DetailUIType: TextFieldNumericDetail

The **Value** (number) element is required.

XML example

```
<Detail>
  <DetailTypeID>1017</DetailTypeID>
  <DisplayOrder>21</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>TextFieldNumericDetail</DetailUIType>
  <DetailName>Example Numeric Detail</DetailName>
  <Numeric>
    <Value>42</Value>
  </Numeric>
</Detail>
```

Update

- **Delete:** The detail value will be deleted if the Value element is empty or not present.
- **Update:** The detail will be updated if the Value element's value has been modified.

CHECK BOX DETAIL

DetailUIType: CheckBoxDetail

The **Value** element is required. It must contain the value "Yes" or "No" or it will not be imported.

XML example

```
<Detail>
  <DetailTypeID>1009</DetailTypeID>
  <DisplayOrder>13</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>CheckBoxDetail</DetailUIType>
  <DetailName>Example Checkbox </DetailName>
  <CheckBox>
    <Value>yes</Value>
  </CheckBox>
</Detail>
```

```
</CheckBox>
</Detail>
```

Update

Delete: The detail will be updated if the Value element's value has changed and equals "Yes" or "No." If the value does not match "Yes" or "No," the value will be set to "No" by default.

MULTIPLE LIST DETAIL

DetailUIType: MultipleSelectListDetail

The **DetailValues** element is required and must contain one or more DetailValue (string) elements. Maximum of 255 characters allowed.

XML example:

```
<Detail>
  <DetailTypeID>1018</DetailTypeID>
  <DisplayOrder>22</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>MultipleSelectListDetail</DetailUIType>
  <DetailName>Example Multiple Select List</DetailName>
  <MultipleSelectList>
    <DetailValues>
      <DetailValue>Value A</DetailValue>
      <DetailValue>Value B</DetailValue>
    </DetailValues>
  </MultipleSelectList>
</Detail>
```

Update

- **Delete:** If an original DetailValue exists that does not match an updated DetailValue, it will be deleted.
- **Update:** Updated DetailValues that do not match an original DetailValue will be inserted.

YES / NO OPTIONS BUTTONS DETAIL

DetailUIType: RadioButtonsYesNoDetail

The **Value** element is required. It must contain the value "Yes" or "No" or it will not be imported.

XML example

```
<Detail>
  <DetailTypeID>1025</DetailTypeID>
  <DisplayOrder>29</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>RadioButtonsYesNoDetail</DetailUIType>
  <DetailName>Yes/No Example</DetailName>
  <RadioYesNo>
    <Value>yes</Value>
  </RadioYesNo>
</Detail>
```

Update

Update: The detail will be updated if the Value element's value has changed and equals "Yes" or "No." If the value does not match "Yes" or "No," the value will be set to "No" by default.

SELECT LIST ADMINISTRATIVELY CONTROLLED DETAIL

DetailUIType: DropDownListDetail

The **SelectedValue** element is required and must contain an existing valid issue. If InsertDetailIssues import configuration is enabled and no existing Issue is matched, a new Issue will be inserted.

XML example

```
<Detail>
  <DetailTypeID>1019</DetailTypeID>
  <DisplayOrder>23</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>DropDownListDetail</DetailUIType>
  <DetailName>Example Admin Select List</DetailName>
  <DropDownList>
    <SelectedValue>
      <Issue IssueTypeID="5">
        <Code>C1</Code>
        <Description>Example Description</Description>
      </Issue>
    </SelectedValue>
  </DropDownList>
</Detail>
```

Update

- **Delete:** The SelectedValue will be deleted if the SelectedValue element is empty or if the Code and Description child elements have no value.
- **Update:** The detail will be updated if the Code and Description element values have been modified and they match an existing issue. The issue type ID must match the issue type ID associated with the detail type. If the InsertDetailIssue setting is enabled and no existing issue is found, a new one will be inserted.

ADDRESS DETAIL

DetailUIType: AddressDetail

The **AddressData** element is required. A combination of AddressLine1, AddressLine2, City, State, Country, ZipCode and Location element values must match an existing address.

XML example

```
<Detail>
  <DetailTypeID>1007</DetailTypeID>
  <DisplayOrder>11</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>AddressDetail</DetailUIType>
  <DetailName>Example Address Detail</DetailName>
  <DetailAddress>
    <AddressData>
      <AddressLine1>1450 S. Eastside Loop</AddressLine1>
      <AddressLine2 />
      <City>Tucson</City>
      <State>Arizona</State>
      <Country>United States</Country>
      <ZipCode>85710</ZipCode>
      <Location>ReliaSoft Headquarters</Location>
    </AddressData>
  </DetailAddress>
</Detail>
```

Update

- **Delete:** The detail address will be deleted if the AddressData element is empty or all of its child elements have no values.

- **Update:** The detail will be updated if the combination of the AddressData child elements values does not match the original address.

COMPANY DETAIL

DetailUIType: CompanyDetail

- The **SelectedValue** element is required and must contain a CompanyID and/or a CompanyName element.
- A combination of CompanyID and/or CompanyName element values must match an existing Company.

XML example

```
<Detail>
  <DetailTypeID>1010</DetailTypeID>
  <DisplayOrder>14</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>CompanyDetail</DetailUIType>
  <DetailName>Example Company</DetailName>
  <DetailCompany>
    <SelectedValue>
      <CompanyID>1</CompanyID>
      <CompanyName>ReliaSoft</CompanyName>
    </SelectedValue>
  </DetailCompany>
</Detail>
```

Update

- **Delete:** The detail will be deleted if the SelectedValue element is empty or contains a CompanyID element with a value = 0 and an empty or not present CompanyName element.
- **Update:** The detail will be updated if combinations of CompanyID and/or CompanyName match a company that differs from the original.

DESCRIPTION DETAIL

DetailUIType: DescriptionDetail

- The **DetailDescriptionData** element is required.
- The DetailDescriptionText element is optional. Maximum of 4000 characters allowed for Microsoft SQL Server and 2000 for Oracle.

- The TargetDate and CompletedDate elements are optional. If present, they must contain a valid date.
- The TargetUser and CompletedBy elements are optional. If present, they must contain a Login element whose value matches an existing user.

XML example

```

<Detail>
  <DetailTypeID>50</DetailTypeID>
  <DisplayOrder>2</DisplayOrder>
  <DetailStep>3</DetailStep>
  <DetailSpan>Yes</DetailSpan>
  <DetailUIType>DescriptionDetail</DetailUIType>
  <DetailName>Example Description Detail</DetailName>
  <DetailDescription>
    <DetailDescriptionData>
      <DetailDescriptionText>Description text</DetailDescriptionText>
      <TargetDate>
        <Year>2013</Year>
        <Month>8</Month>
        <Day>7</Day>
        <Hour>20</Hour>
        <Minute>1</Minute>
        <Second>0</Second>
        <FormattedDate>08/07/2013 01:01 PM</FormattedDate>
      </TargetDate>
      <TargetUser />
      <CompletedDate>
        <Year>2013</Year>
        <Month>8</Month>
        <Day>7</Day>
        <Hour>20</Hour>
        <Minute>1</Minute>
        <Second>0</Second>
        <FormattedDate>08/07/2013 01:01 PM</FormattedDate>
      </CompletedDate>
      <CompletedBy />
    </DetailDescriptionData>
  </DetailDescription>
</Detail>

```

Update

- **Delete:** The detail will be deleted if the DetailDescriptionData element has no child elements, or the DetailDescriptionText, TargetDate, TargetUser, CompletedDate and CompletedBy elements are empty or not present.
- **Update:** The detail will be updated if the DetailDescriptionText, TargetDate, TargetUser or CompletedBy element values are modified. The TargetUser and CompletedBy elements, if present, must contain a valid user. The TargetDate and CompletedDate, if present, must contain a valid date.

STATUS DETAIL

DetailUIType: StatusDetail

- The **DetailStatusData** element is required. It must contain the following elements:
- The DetailStatusDate element value must contain a valid date.
- The DetailStatusDescription element must have a value. Maximum of 1024 characters allowed.
- The WrittenBy element must contain a Login element whose value matches an existing user.

XML example

```
<Detail>
  <DetailTypeID>1023</DetailTypeID>
  <DisplayOrder>27</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>Yes</DetailSpan>
  <DetailUIType>StatusDetail</DetailUIType>
  <DetailName>Example Status Detail</DetailName>
  <DetailStatus>
    <DetailStatusData>
      <DetailStatusDate>
        <Year>2013</Year>
        <Month>9</Month>
        <Day>11</Day>
        <Hour>21</Hour>
        <Minute>9</Minute>
        <Second>13</Second>
        <FormattedDate>09/11/2013 02:09 PM</FormattedDate>
      </DetailStatusDate>
      <DetailStatusDescription>Test status</DetailStatusDescription>
      <WrittenBy>
        <FirstName>Pam</FirstName>
        <LastName>User</LastName>
      </WrittenBy>
    </DetailStatusData>
  </DetailStatus>
</Detail>
```



```

    <Login>PUSER</Login>
  </WrittenBy>
</DetailStatusData>
</DetailStatus>
</Detail>

```

Update

- **Delete:** A detail status will be deleted if the DetailStatusDescription element has no value.
- **Update:** A detail status will be updated if the StatusDate and/or the StatusDescription elements have been modified. The StatusDescription must have a non-empty value and the StatusDate element must contain a valid date. Statuses that have a different user and status date will be inserted.

FAILURE MODE DETAIL

DetailUIType: FailureModeDetail

- The **DetailFailureModes** element is required and must contain one or more DetailFailureMode elements.
- At least one **DetailFailureMode** element is required.
- The **FailureId** element is required. It must match an existing failure.
- The CauseId element is optional. If present, it must match an existing cause.
- If FailureId or CauseId are present and their values do not match an existing Failure or Cause, the Failure Mode will not be imported.
- The PartID, PartName, FailureDescription and CauseDescription elements are export only.

XML example

```

<Detail>
  <DetailTypeID>852</DetailTypeID>
  <DisplayOrder>9</DisplayOrder>
  <DetailStep>1</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>FailureModeDetail</DetailUIType>
  <DetailName>Example Failure Mode</DetailName>
  <DetailFailureModes>
    <DetailFailureMode>
      <PartID></PartID>
      <PartName></PartName>
      <FailureId>1</FailureId>
      <FailureDescription>Failure 1</FailureDescription>
      <CauseId>1</CauseId>
    </DetailFailureMode>
  </DetailFailureModes>
</Detail>

```

```

    <CauseDescription>Cause 1</CauseDescription>
  </DetailFailureMode>
  <DetailFailureMode>
    <FailureId>2</FailureId>
    <FailureDescription>Failure 2</FailureDescription>
    <CauseId>2</CauseId>
    <CauseDescription>Cause 2</CauseDescription>
  </DetailFailureMode>
</DetailFailureModes>
</Detail>

```

Update

- **Delete:** If an original detail failure mode exists that does not match an updated detail failure mode, it will be deleted.
- **Update:** Any detail failure mode that does not match an original detail failure mode will be inserted.

SELECT LIST, ADMINISTRATIVELY CONTROLLED, MULTIPLE DETAIL

DetailUIType: MultipleSelectListWithAdminDropDownListDetail

- The **SelectedValues** element is required and must contain one or more SelectedValue elements.
- The SelectedValue element must contain an existing valid issue. If InsertDetailIssues import configuration is enabled and no existing Issue is matched, a new Issue will be inserted.

XML example

```

<Detail>
  <DetailTypeID>893</DetailTypeID>
  <DisplayOrder>9</DisplayOrder>
  <DetailStep>1</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>MultipleSelectListWithAdminDropDownListDetail</DetailUIType>
  <DetailName>Failure Codes</DetailName>
  <MultipleSelectListWithAdminDropDownList>
    <SelectedValues>
      <SelectedValue>
        <Issue IssueTypeID="1058">
          <Code>1092</Code>
          <Description>System will not start</Description>
        </Issue>
      </SelectedValue>
    </SelectedValues>
  </MultipleSelectListWithAdminDropDownList>
</Detail>

```

```
</MultipleSelectListWithAdminDropDownList>
</Detail>
```

Update

- **Delete:** If an original Selected Value issue exists that does not match an updated Selected Value issue, it will be deleted.
- **Update:** Selected Values will be added if they contain a valid issue that does not match an original Selected Value issue. If the InsertDetailIssue setting is enabled and an updated Selected Value issue does not match an existing issue, a new issue will be inserted.

SELECT LIST, USER CONTROLLED, MULTIPLE DETAIL

DetailUIType: MultipleSelectListWithDropDownListDetail

- The **DetailValues** element is required and must contain one or more DetailValue elements.
- At least one **DetailValue** (string) element is required. Maximum of 255 characters allowed.

XML example

```
<Detail>
  <DetailTypeID>938</DetailTypeID>
  <DisplayOrder>3</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>MultipleSelectListWithDropDownListDetail</DetailUIType>
  <DetailName>Example Multiple Select List with Dropdown</DetailName>
  <MultipleSelectListWithDropDownList>
    <DetailValues>
      <DetailValue>Value A</DetailValue>
      <DetailValue>Value B</DetailValue>
    </DetailValues>
  </MultipleSelectListWithDropDownList>
</Detail>
```

Update

- **Delete:** If an original DetailValue exists that does not match an updated DetailValue, it will be deleted.
- **Update:** Updated DetailValues that do not match an original DetailValue will be inserted.

SELECT LIST, CHECKBOX OPTIONS, MULTIPLE DETAIL

DetailUIType: CheckBoxListDetail

The **CheckBoxLists** element is required and must contain one or more **CheckBoxList** elements.

CheckBoxList has the following elements:

- The **SelectedValue** element is required and must contain an existing valid issue. If InsertDetailIssues import configuration is enabled and no existing Issue is matched, a new Issue will be inserted.
- The Value element is optional. If present, its value must be “On” or “Off.”
- The **DateChecked** element is required if the Value element’s value contains “On”; otherwise, it is not imported. If present, its value must be a valid date.

XML example

```
<Detail>
  <DetailTypeID>1003</DetailTypeID>
  <DisplayOrder>9</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>CheckBoxListDetail</DetailUIType>
  <DetailName>Example Check Box List</DetailName>
  <CheckBoxLists>
    <CheckBoxList>
      <SelectedValue>
        <Issue IssueTypeID="150">
          <Code>I1</Code>
          <Description>Item 1</Description>
        </Issue>
      </SelectedValue>
      <Value>on</Value>
      <DateChecked>
        <Year>2013</Year>
        <Month>9</Month>
        <Day>17</Day>
        <Hour>18</Hour>
        <Minute>41</Minute>
        <Second>37</Second>
        <FormattedDate>09/17/2013 11:41 AM</FormattedDate>
      </DateChecked>
    </CheckBoxList>
    <CheckBoxList>
      <SelectedValue>
```

```

    <Issue IssueTypeID="150">
      <Code>I2</Code>
      <Description>Item 2</Description>
    </Issue>
  </SelectedValue>
  <Value>off</Value>
  <DateChecked />
</CheckBoxList>
</CheckBoxLists>
</Detail>

```

Update

- **Delete:** If an original CheckBoxList item exists that does not match an updated CheckBoxList item, it will be deleted.
- **Update:** A CheckBoxList item will be updated if SelectedValue, Value or DataChecked have been modified. If a CheckBoxList item is present that does not match an original CheckBoxList item, it will be inserted.

CURRENCY DETAIL

DetailUIType: MoneyDetail

- The **Value** (decimal) element is required.
- The Currency element is optional and not used on import.

XML example

```

<Detail>
  <DetailTypeID>1011</DetailTypeID>
  <DisplayOrder>15</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>MoneyDetail</DetailUIType>
  <DetailName>Example Money Detail</DetailName>
  <Money>
    <Value>42</Value>
    <Currency>
      <Issue IssueTypeID="59">
        <Code>ISK</Code>
        <Description>Iceland, Kronur</Description>
      </Issue>
    </Currency>
  </Money>
</Detail>

```

```
</Money>
</Detail>
```

Update

- **Delete:** The detail will be deleted if the Money element has no child elements or the Value and Currency elements have no value.
- **Update:** The detail will be updated if the Value element's value has been modified and the Currency matches the original currency or is not specified.

ACCESSORY DETAIL

DetailUIType: AccessoryDetail

- The **DetailAccessories** element is required and must contain one or more **DetailAccessory** elements.
- The **DetailAccessory** element has the following child elements:
 - The AccessoryDescription (string) element is required. Maximim of 255 characters allowed.
 - The PartNumber (string) and SerialNumber (string) elements are optional.

XML example

```
<Detail>
  <DetailTypeID>1004</DetailTypeID>
  <DisplayOrder>10</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>AccessoryDetail</DetailUIType>
  <DetailName>Example Accessory</DetailName>
  <DetailAccessories>
    <DetailAccessory>
      <AccessoryDescription>Example Part 1</AccessoryDescription>
      <PartNumber>EP1</PartNumber>
      <SerialNumber>SN1</SerialNumber>
    </DetailAccessory>
    <DetailAccessory>
      <AccessoryDescription>Example Part 2</AccessoryDescription>
      <PartNumber>EP2</PartNumber>
      <SerialNumber>N/A</SerialNumber>
    </DetailAccessory>
  </DetailAccessories>
</Detail>
```

Update

- **Delete:** If an original DetailAccessory exists that does not match an updated DetailAccessory, it will be deleted.
- **Update:** A DetailAccessory will be inserted if it does not match an original DetailAccessory.

DATE DETAIL

DetailUIType: DateFieldDetail

The **Date** element is required and must be a valid date.

XML example

```
<Detail>
  <DetailTypeID>1013</DetailTypeID>
  <DisplayOrder>17</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>Yes</DetailSpan>
  <DetailUIType>DateFieldDetail</DetailUIType>
  <DetailName>Example Date Detail</DetailName>
  <DetailDate>
    <Date>
      <Year>2013</Year>
      <Month>9</Month>
      <Day>4</Day>
      <Hour>19</Hour>
      <Minute>17</Minute>
      <Second>0</Second>
      <FormattedDate>09/04/2013 12:17 PM</FormattedDate>
    </Date>
  </DetailDate>
</Detail>
```

Update

- **Delete:** The detail will be deleted if the Date element has no child elements.
- **Update:** The detail will be updated if the Date element's child elements are modified and contain a valid date.

CURRENT SYSTEM USERS DETAIL

DetailUIType: UserInfoDetail

The **User** element is required. It must contain a Login element whose value matches an existing user.

XML example

```
<Detail>
  <DetailTypeID>1012</DetailTypeID>
  <DisplayOrder>16</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>UserInfoDetail</DetailUIType>
  <DetailName>Example User Detail</DetailName>
  <UserInfo>
    <User>
      <FirstName>Pam</FirstName>
      <LastName>User</LastName>
      <Login>PUSER</Login>
    </User>
  </UserInfo>
</Detail>
```

Update

- **Delete:** The detail will be deleted if the User element is empty or if all of the following child elements are empty: Login, FirstName, MiddleName and LastName.
- **Update:** The detail will be updated if the Login value matches an existing user that differs from the original user.

SYSTEM CONTACTS DETAIL

DetailUIType: ContactDetail

The **Contact** element is required. The combination of FirstName and LastName must match an existing contact.

XML example

```
<Detail>
  <DetailTypeID></DetailTypeID>
  <DisplayOrder></DisplayOrder>
  <DetailStep></DetailStep>
  <DetailSpan></DetailSpan>
  <DetailUIType>ContactDetail</DetailUIType>
  <DetailName>Example Contact Detail</DetailName>
  <DetailTypeID></DetailTypeID>
```



```

<DetailContact>
  <Contact>
    <FirstName />
    <LastName />
  </Contact>
</DetailContact>
</Detail>

```

Update

- **Delete:** The detail will be deleted if the Contact element has no child elements.
- **Update:** The Detail will be updated if the combination of FirstName and LastName match an existing contact that differs from the original contact.

TREE DETAIL

DetailUIType: TreeDetail

- The **TreeData** element is required.
 - It must contain a Code and Description element that match an existing issue.
 - If InsertDetailIssues import configuration is enabled and no existing Issue is matched, a new Issue will be inserted.
 - May have the optional ChildItem element.
 - Each TreeData element represents one row in the Tree Detail.
- The optional ChildItem element, if present, must contain a Code and Description element that matches an existing issue.
 - It may contain a ChildItem element.
 - ChildItem elements can be nested up to ten levels.

XML example

```

<Detail>
  <DetailTypeID>968</DetailTypeID>
  <DisplayOrder>4</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>No</DetailSpan>
  <DetailUIType>TreeDetail</DetailUIType>
  <DetailName>Example Tree</DetailName>
  <Tree>
    <TreeData>
      <Code>B1</Code>

```

```

    <Description>Branch 1</Description>
  </TreeData>
  <TreeData>
    <Code>B2</Code>
    <Description>Branch 2</Description>
    <ChildItem>
      <Code>NB1</Code>
      <Description>Nested Branch 1</Description>
    </ChildItem>
  </TreeData>
</Tree>
</Detail>

```

Update

- **Delete:** The TreeData item will be deleted if the TreeData element is empty.
- **Update:** If any Issue is modified inside of a TreeData element, that TreeData item will be deleted and the new TreeData item will be inserted.

ATTACHMENT DETAIL

DetailUIType: AttachmentsDetail

- The **AttachmentType** element is required. It must match an existing attachment type. Attachment types include:
 - Uploaded File
 - URL Link
 - Text
 - Project (XFRACAS)
 - Problem (XFRACAS)
 - Incident (XFRACAS)
 - Failure Analysis (XFRACAS)
 - Customer (XFRACAS)
 - Action (XFRACAS)
- The Relationship (string) element is optional and used only for XFRACAS attachment types. If present, the value must match an existing issue description with an issue type of "Attachment - Record Association Type." Below are the standard relationship types. Relationships include:
 - Master
 - Sub
 - Superceding
 - Superceeded
 - Amending

UNRESTRICTED

- Amended
- The AttachmentTitle (string) element is optional. Maximum of 255 characters allowed.
- The AttachmentDescription (string) element is optional. Maximum of 500 characters allowed.
- The **FileName** element is required for attachment type URL Link and not imported for all other attachment types.
- The XFRACASID element is optional, but it must be present for XFRACAS type attachments. It must contain an ID that matches an existing item of the same type as the AttachmentType.
- RelatedID is optional. It contains the Blob Data ID for URL and Uploaded file attachment types (Export Only). It can also be used to specify the database ID for XFRACAS attachment types.
- The att_key element is optional. Export only.

XML example

```

<Detail>
  <DetailTypeID>999</DetailTypeID>
  <DisplayOrder>6</DisplayOrder>
  <DetailStep>5</DetailStep>
  <DetailSpan>Yes</DetailSpan>
  <DetailUIType>AttachmentsDetail</DetailUIType>
  <DetailName>Example Attachments</DetailName>
  <DetailAttachments>
    <DetailAttachment>
      <AttachmentType>URL Link</AttachmentType>
      <Relationship />
      <AttachmentTitle>Example URL Link</AttachmentTitle>
      <AttachmentDescription>ReliaSoft Homepage</AttachmentDescription>
      <FileName>http://reliasoft.com</FileName>
      <RelatedID>50</RelatedID>
    </DetailAttachment>
    <DetailAttachment>
      <AttachmentType>Problem</AttachmentType>
      <Relationship>Sub</Relationship>
      <AttachmentTitle>Example XFRACAS link</AttachmentTitle>
      <AttachmentDescription>Link to XFRACAS Problem</AttachmentDescription>
      <XFRACASID>PRR-1</XFRACASID>
    </DetailAttachment>
    <DetailAttachment>
      <AttachmentType>Blob Data</AttachmentType>
      <Relationship />
      <AttachmentTitle>Example File Attachment</AttachmentTitle>
      <AttachmentDescription>An uploaded file</AttachmentDescription>
  </DetailAttachments>
</Detail>

```

```
<FileName>TestFile.png</FileName>  
<RelatedID>125</RelatedID>  
</DetailAttachment>  
<DetailAttachment>  
  <AttachmentType>Text</AttachmentType>  
  <Relationship />  
  <AttachmentTitle>Example Text Attachment</AttachmentTitle>  
  <AttachmentDescription>Attachment text here</AttachmentDescription>  
</DetailAttachment>  
</DetailAttachments>  
</Detail>
```

Update

Not updateable.

XFRACAS Web Service

The following functions are available in the XFRACAS web service. For more information, including an example project, please consult the XFRACAS admin help.

PERMISSIONS

Calling the web service requires passing Windows credentials that are used to check permissions in XFRACAS. The user that your application runs as must have the “Access Admin Tab” and “Manage Import” permissions for the relevant entities in XFRACAS. For functions with an entity ID parameter (eid), the permissions are checked on that entity. Otherwise, the permissions are checked against the user’s default entity.

BASE URL

If the URL to XFRACAS is `http://myhost/xfracas`, the base URL for the web service will be `http://myhost/xfracas/xfapi/`.

FUNCTIONS

Each of the service functions is called by hitting a URL, either with a form POST, or a GET request. Note that all of the parameters must be URL-escaped. For example, the filename parameter would be “my+file.xml” for a file named “my file.xml”.

Note that date parameters are transcoded via .NET and must be UTC dates formatted per ISO 8601. For example: 2017-12-01T18:00:00. Dates inside Strings in some of the response examples below may be in other formats.

Parameters marked with * are required. Parameters marked with ** are a group of parameters, one of which is required (for example, one of m1, m2 or m3 is required for the importmetrics function).

importxml

Inserts an XML file (which may contain data for one or multiple records) into the XFRACAS import queue. This is equivalent to clicking **Add** on the XFRACAS Data Import page. Uploads an XML byte array and returns a UUID that identifies the file that was added to the queue (the import record id).

Note: *The maximum size for files that can be inserted into the queue by the web service is set via the XFRACAS Admin utility on the web server.*

Example:

`http://myhost/xfracas/xfapi/importxml?filename=myFile.xml&desc=fileDesc&ct=text/xml&it=1eid=1`

Method:

POST

Parameters:

*filename - Name of the file being imported

*desc – Description that will display in the logs on the XFRACAS Data Import page

*ct - Content type ("text/xml")

*it - Import type (Integer, valid values below)

- 1 – Incident
- 2 – Problem
- 3 – CSI
- 4 – Failure Analysis
- 5 - Project
- 6 - Issue
- 7 - User
- 8 - Address
- 9 - Company
- 10 – Action
- 12 - System
- 13 – MasterBOM

*eid - Entity ID (the entity that the data will be imported into)

Response:

```
{"result":{"ID":"26b5f206-1e5b-468d-9abd-e4abdc11b685"},"status":0,"Messages":[]}
```

importstatus

Retrieves the status of a previous **importxml** request. Information about the import includes the status. A status of 1 indicates an Error, 2 indicates the import is in the Inbox, 3 indicates the data has been Processed. Optionally, the error and import logs can be included in the response.

Example:

<http://myhost/xfracas/xfapi/importstatus?eid=1&name=t&id=3&inclog=0&incerr=1>

Method:

GET

Parameters:

*eid – Entity id

*id – Import record id (the result from the initial **importxml** call).

inclog – Include the import log in the response

incerr – include the error log in the response

Response:

```
{"result":{"ImportId":3,"ImportStatus":1,"ErrorLog":"-----test (10/26/2017 10:02 AM)
-----\r\n\r\nSystem.Xml Unexpected end tag. Line 1, position
3.\r\n"},"status":0,"Messages":[]}
```

processimports

Starts the import process, which attempts to process all files in the import queue for all entities. This is equivalent to clicking **Process** on the XFRACAS Data Import page. To view the processing status of the files, check the **Processed** and **Error** logs on the website, or pass the integer result from this method to the **importstatus** method's **id** parameter.

Example:

<http://myhost/xfracas/xfapi/processimports?eid=1>

Method:

GET

Parameters:

*eid – Entity ID (used for permissions check)

Response:

```
{"result":"1","status":0,"Messages":["Process imports started at 7/19/2018 1:45:47
PM."]}
```

importmetrics

Inserts up to three time/usage values for a specified serialized system on a specified date. This is equivalent to clicking **Update System Hours** on the XFRACAS CSI page.

Example:

<http://myhost/xfracas/xfapi/importmetrics?pName=part&pNumber=p1&sn=123&m1=11&m2=22&m3=33&md=2017-12-01T18:00:00&eid=1>

Method:

POST

Parameters:

*pname - Part name

*pnumber - Part number

*sn - Serial number

**m1 - Metric 1

**m2 - Metric 2

**m3 - Metric 3

*md - Metric date (formatted as an ISO 8601 String, such as "2017-12-01T18:00:00")

*eid - Entity id (the entity that the data will be imported into)

Response:

```
{"result": "Success", "status": 0, "Messages": []}
```

entities

Returns an array of the entities that are accessible to the user the application is running as. The entity id (eid) is a required parameter for other functions.

Example:

<http://myhost/xfracas/xfapi/entities>

Method:

GET

Parameters:

None

Response:

```
{"result": [{"id": 2, "entityName": "EntTest"}, {"id": 1, "entityName": "RELIASOFT MODEL DATABASE"}], "status": 0, "Messages": []}
```

issueid

Returns the IssueTypeID for a specific option in a lookup list, given the name of the list and either the description or code for the option. This can be used when creating new XML files. For example, in incident records, the "Incident State" and "Incident State Closed" lookup lists contain the valid options for the <status> element in the XML file.

Example:

<http://myhost/xfracas/xfapi/issueid?type=Incident+State&eid=1&desc=Open&code=1>

Method:

GET

Parameters:

- *type – Name of the lookup list
- *eid – Entity id
- **desc – Exact description of the list option
- **code – Exact code of the list option

Response:

```
{"result":[{"id":10,"description":"Open","code":"1"}],"status":0,"Messages":[]}
```

issues

Returns a list of options for a specific lookup list, given at least the name of the list.

Example:

<http://myhost/xfracas/xfapi/issues?type=TypeName&eid=1&desc=Item&code=A>

Method:

GET

Parameters:

- *issuetype – Name of the lookup list
- *eid – Entity id
- desc – Search term for the list option description
- code – Search term for list option code

Response:

```
{"result":[{"id":1,"description":"An Item","code":"A1"}, {"id":2,"description":"Another Item","code":"A2"}],"status":0,"Messages":[]}
```

parts

Returns a list of parts that contain a specified part name and/or part number. If the sn parameter is set, searches for a serialized part.

Example:

<http://myhost/xfracas/xfapi/parts?eid=1&name=part&number=b&sn=001>

Method:

POST

UNRESTRICTED

Parameters:

- *eid – Entity id
- **name – Search term for part name
- **number – Search term for part number
- **sn – Search term for serial number (name and number are required if sn is populated)

Response:

```
{"result":[{"id":1,"partName":"My part", "partNumber":"tb1", "level":1, "hid":"1", "parentHid":null, "topLevelHid":null, "shid":"1", "parentShid":"1", "topLevelShid":"1"}], "status":0, "Messages":[]}
```

incident

Returns a limited set of data about a specific incident.

Example:

<http://myhost/xfracas/xfapi/incident?displayid=REL-1&eid=1>
<http://localhost:9999/xfapi/incident?eid=1&dettypid=761&detval=123>

Method:

POST

Parameters:

- *displayid – Exact incident id (record number)
- *eid – Entity id

Response:

```
{"result":{"id":1, "displayId":"REL-1", "occurrenceDate":"2017-12-01T18:00:00", "creatorName":"DOMAIN\\username", "ownerName":"DOMAIN\\username"}, "status":0, "Messages":[]}
```

logexc

Writes exception information to the XFRACAS diagnostics log. The body of the request must contain a VB Exception object serialized as JSON (see the example application for a demonstration).

Example:

<http://myhost/xfracas/xfapi/logexc?et=1&c=a+comment>

Method:

POST

Parameters:

*et - Entry type (Integer: 1 - Error, 2 - Warning, 4 - Information)

*c - Comment (text)

Form body:

JSON string containing serialized Exception object.

Response:

```
{"result": "Success", "status": 0, "Messages": []}
```

logmsg

Writes a message to the XFRACAS diagnostics log.

Example:

<http://myhost/xfracas/xfapi/logmsg?m=a+message&et=4>

Method:

POST

Parameters:

*m – Message string

*et - Entry type (Integer: 1 - Error, 2 - Warning, 4 - Information)

Response:

```
{"result": "Success", "status": 0, "Messages": []}
```