SOTS Implementation Design Document

<u>Disclaimer:</u> This implementation design document is provided for informational purposes only and is not in any way a part of the mandatory implementation of the SOTS standard nor is it intended to replace any aspect of the SOTS requirements. Its intended purpose is to offer guidance to those who may be interested in a highly automated approach to processing SOTS data.

1 Introduction 3 1.1 BENEFITS	
2 DETAILED DESIGN	4
2.1 FLOWCHART	4
3 SYSTEM OVERVIEW	8
3.1 SOTS FILE HEADER	
3.2.1 File Validation 3.2.2 Record Validation	
3.2.3 Content Validation	14
4.1 CLASS DIAGRAM	
4.2.1 tl_sots_email	
4.2.3 tl_sots_record	
5 APPENDIX A – OUTAGE CLASSIFICATION ENUMERATED VALUES	
OUTAGE CLASSIFICATION FIELD VALUES	
6 APPENDIX B - PROPOSED XML SCHEMA FOR SOTS PROCESSOR	22

1 Introduction

The TL 9000 Standard Outage Template System (SOTS) provides an interface for submission of TL 9000 Outage data that can be asynchronously processed. Using the SOTS interface will permit an automated and/or centralized handling of the outage data file.

The SOTS interface is a part of the TL 9000 standard owned by the QuEST Forum. (http://www.tl9000.org/tl_sots.htm)

The SOTS Processor reads and parses the emails in a mailbox and stores the results in a database. The SOTS email may contain one or more attachments in either CSV or XML format. The automation of the SOTS process will allow each attachment which contains one or more SOTS record to be parsed, processed, validated and then inserted into a database. The records received via SOTS are later extracted as part of the monthly process for generating TL 9000 metrics.

1.1 Benefits

Modifications to the SOTS Processor will provide the following benefits:

- The record and content validations will be applied on all the records after the file validations are cleared. The error and warning will be logged and email will be sent with the log information.
- Header information will provide for more manageable batch processes and support multiple, concurrent revisions of the SOTS specification
- Support multiple SOTS records per file
- Bring consistency and automation to record validation
- o Detect duplicates in file submission and in record submission
- Detect duplicates between SOTS record submission and Outage application submission

2 Detailed Design

2.1 Flowchart

Diagram below shows the proposed design:







File_processing_Status – Pending or Complete

File will be in pending status/mode unless the Record_Processing_Status for all the records associated with this file are in 'extracted' mode. When all the records are in extracted mode, the backend will convert the file processing status to Complete. Once the file status is Complete, if the file with the same Company Name and Sequence ID is submitted, it will be rejected saying the file is a duplicate and will be shown the exit door.

Record Process Status- Pending, Ready to be extracted, Extracted or Inactive

Pending - Stays in this mode unless all the validations are cleared.

Ready to be extracted - Changes from pending to this state when all the validations are clear

(As long as a record is in 'ready to be extracted' mode, it can be overwritten any number of times.)

Extracted - This change is done by the backend on a record-by-record basis once each record has a Record_Process_Status of 'ready to be extracted'. Once a record is in extracted mode, it cannot be overwritten

Inactive - If the record comes in with a status of 'deleted' and the Record_Process_Status is not 'extracted' already, the Record_Process_Status will be changed to 'Inactive'.

Record_staus – New, Revised or Delete

The record is submitted with one of the above possible statuses.

If <u>New</u>, the system will search for the record in the record table using the outage_id/file_id. If found, it will overwrite the original record with this. If not found, a new row will be created for it .

If <u>*Revised*</u>, the system will search for the record in the record table using the outage_id/file_id. If found, it will overwrite the original record with this. If not found, it will put it in the error log.

If the record is marked as <u>Deleted</u> and is found in the table, the record_process_status will be converted to Inactive. If not found, it will be put in the error log.

A record will be inserted /overwritten only if the record_process_status is not marked 'Extracted'.

3 System Overview

The system will support a parser for .XML and .CSV files. Each file submission will be comprised of a Header record and one or more Data records. The Header is mandatory and is the first record in the file.

3.1 SOTS File Header

The header provides information on:

- The revision of the SOTS specification. This information is used to permit concurrent support for multiple versions of SOTS. (SOTSRevision)
- Unique identification of the file to support detection of duplicate file submissions (SequenceNumber and CompanyName)
- An email address for the sender. This information is used to support communication to the sender if a record fails either Record or Content validation (Response Email)

In addition, a "TestMode" parameter has been included to support testing of the SOTS interface (internally or with the customer)

Order (CSV)	Field	Mandatory	Format	Description
1	SOTSRevision	Yes	Number	This is the revision of the SOTS spec in use for the file
2	CompanyName	Yes	String (80 char max)	Name of the Company, used for unique identification of the file
3	DateFileSent	Yes	YYYY-MM-DD	Date file was emailed,
4	SequenceNumber	Yes	Number	Sequence number is mandatory. This will be part of unique key will be same for those files that are submitted again with the revised, confirmed or deleted records. This will be stored in SequenceNo. Field in TL_FILE table.
5	ResponseEmail	Yes	String (80 char max)	Email address for submitter; In the future this may be used for communicating back to the sender
6	RecordsInFile	Yes	Number	Number of (data) records included in the file for processing. May be 0
7	TestMode	No	'true' or 'false'	Used to determine whether records in this file are for testing purposes; 'false' is assumed if this field is left blank

The Header Record data elements are expected in the order as shown in the Table above. For any Optional data element, the delimiter (comma) for the field is expected even if a value is not supplied.

The format of the two File types can be one of the two following:

CSV file:

The header is the first record in the file and is prefixed with a '#' (the '#' will be the first character in the file). Then the Data Record(s) follow. The end of the record will be represented by $\langle EOL \rangle$.

XML

XML will use the standard tags for separating the header record from the Data Record(s).

3.2 SOTS Validation

Email attachments sent to the TL 9000 Processor will be validated at three levels:

- File Validation Validation at the file level. If the file has a valid extension, does it contain all the mandatory fields?
- Record Validation Validation for field data types and mandatory/optional fields
- Content Validation Validation against field values (e.g. Does the support case ID resolve to a recognized TAC Outage case)

File validation, record validation, and content validation failures will cause an error email to be generated to the Customer/Submitter email . Errors will be generated for absence of mandatory fields.

In case a file validation fails, an error log will be maintained and the control will go to validate the next file. There will be no further validation checks on this.

In order to aid the user, records will continue to be processed following a record or content validation error (once the file validation has passed). This design supports multiple errors to be reported on a record (where possible). This will help the customer in re-submitting the corrected record for all the errors in a single instance. For example, if a record has 5 record and content validation errors it would have to be re-submitted 5 times without the above practice.

3.2.1 File Validation

File validation confirms the basic format of the file. If the file fails to parse or does not have the required file data elements, an email will be sent to the submitter's email address. The Internal Business Support mailer address will also be cc'ed.

The following validations will be done and the error messages will be logged in the Log File.

1. An attachment must have an extension of either .CSV or .XML.

ERROR MESSAGE: "File Type Not Recognized (ext)"

2. An attachment must parse. This is a generic error when an unexpected error occurs during file validation.

ERROR MESSAGE: "File Failed In Parsing (error)"

- 3. A file header is mandated by the SOTS standard. A header must be present and it must be properly formed or the file will be rejected.
 - a. An attachment must have a header.
 - b. For CSV, detect the leading '#'.
 - c. For XML, detect existence of <SOTSHeader> tag. [CSV/XML]

ERROR MESSAGE: "Header Missing in the File"

d. Header must have 7 fields.

ERROR MESSAGE: "Header Field Count Is Wrong (count)"

e. Mandatory header fields must consist of at least one character (nonwhitespace). [CSV/XML]

ERROR MESSAGE: "Mandatory Header Field Missing (field)"

f. Header fields must have the defined data type/format. [CSV/XML]

ERROR MESSAGE: "Header Field Has Bad Data Type or Format (field)"

g. In case number of records in a file attachment is 0 and the TEST_MODE is set as False or left blank.

ERROR MESSAGE: "File is without attachment"

Other file validations-

h. SequenceNumber/CompanyName header fields must be unique. This combination of values must not already exist in tl_sots_file with a file _process_status of 'C' (*Complete*). [CSV/XML]

ERROR MESSAGE: "Duplicate File Submission"

i. In case number of records in a file attachment is 0 and the TEST_MODE is set as true, it will be considered as test only.

3.2.2 Record Validation

Record validation confirms the elements of the record are of the right data type, format, and/or is one of an enumerated list of values. Record (along with content) validation continues until all validation rules have been exhausted for a record. The error log, composed of any record and content validation errors, is sent to a customer- configurable email address (with the original attachment).

The following set of Validations will be done for a record:

1. A record must consist of 43 fields (record field count in SOTS revision 2.0)

ERROR MESSAGE: "Record Field Count Is Wrong (count)"

	SOTS Version 2.0 Data	Mandatory
	Element	
1	Outage ID	Mandatory
2	Record Status	Mandatory
3	Company Name	Mandatory
4	D&B Number	Optional
5	Geographic Location	Mandatory
	code	
6	Report Date	Optional
7	Location-Country	Optional
8	Location-Region	Optional
9	Location-City	Optional
10	Site Name	Optional
11	Originator-Last Name	Mandatory
12	Originator-First Name	Mandatory
13	Originator-Phone	Mandatory
14	Originator-email	Mandatory
15	Incident Date	Mandatory
16	Incident time	Mandatory

2. Mandatory record fields must consist of at least one character (non-whitespace).

17	TotalOutage Duration	Mandatory
18	PartialOutage Duration	Mandatory
19	Partial Impact	Mandatory and dependent on above
20	Excess Time	Mandatory
21	Excess Time Details	Mandatory and dependent on above
22	Inability to accesss time	Mandatory
23	Live System	Mandatory
24	Manufacturer	Mandatory
25	Model Name/Number	Mandatory
26	Card Name/Number	Mandatory & dependent on below
27	SW Release	Mandatory
28	System Type	Optional
29	Host or Remote	Mandatory
30	CCS Outage Only	Mandatory
31	Admin Outage Only	Mandatory
32	Scheduled Event	Mandatory
33	Service Impacting	Mandatory
34	Amt of Service Affected	Mandatory
35	Type of Service Affected	Mandatory & dependent on above
36	Outage Classification	Mandatory
37	Attributable to	Mandatory
38	Installation Related Outage	Mandatory
39	Installing Company Name	Mandatory &Dependent on above
40	Description of Service Failure	Optional
42	Root Cause Analysis	Optional
42	Organization Contacted	Mandatory
43	Organization Ticket number	Dependent on above

ERROR MESSAGE: "Mandatory Record Field Missing (field)"

3. Record fields must follow required format.

Record field - Required format:

- f Record Date YYYY-MM-DD
- f Incident Date YYYY-MM-DD
- f Incident Time HH:MM:SS
- f Total Outage Duration HHH:MM:SS.SS
- *f* Partial Outage Duration HHH:MM:SS.SS
- f Partial Impact NN
- f Excess time HH :MM
- f Inability to Access time HHH :MM
- f Amount of Service Affected NNNNNN (7 digits max)

ERROR MESSAGE: "Record Field Has Bad Format (field)"

- 4. Record fields must be one of enumerated values, when required. Record field - Enumerated value list:
 - f Record Status New, Revised, Deleted
 - f Live System? Y, N
 - f Host or Remote Host, Remote, NA

 - f CCS Outage Only? Y, N f Admin Outage Only? Y, N
 - f Scheduled Event? Y, N
 - f End User Impacting? Y. N
 - f Attributable To Customer, Product, External
 - f Installation Related Outage? Y, N
 - f Outage Classification (See Appendix A in this document)
 - f Organization Contacted Y, N

ERROR MESSAGE: "Record Field Value Not In Enumerated List (field)"

5. Record fields must not be less than zero, when required.

Record field with positive (or zero) value requirement

f	Total	Outage	Duration
---	-------	--------	----------

- f Partial Outage Duration
- f Partial Impact
- f Excess Time
- f Inability to Access Time
- f Amount of Service Affected

ERROR MESSAGE: "Record Field Value Must Not Be Less Than Zero (field)"

3.2.3 Content Validation

Content validation confirms that derived record field values are acceptable. Content validation continues until all validation rules have been exhausted for a record. The error log, composed of any record and content validation errors, is sent to a customer-configurable email address (with the original attachment).

The following Validation Rules will be applied

1. Model Name/Number must be a valid product.

ERROR MESSAGE: "Model Name/Number Not Recognized (Model Name/Number)"

2. Company Name must resolve to valid company.

ERROR MESSAGE: "Company Name Not Valid (Company Name)"

3. Organization Ticket Number must resolve to valid ticket number.

ERROR MESSAGE: "Ticket Number Not Found For Organization Ticket Number (Supplier Ticket Number)"

 If Record Status is 'Revised' or 'New' or 'Delete', and record_process_status in tl_sots_record for the record is status/mode "extracted" -

ERROR MESSAGE: "Record Already Processed During Monthly Extracts".

 Total Outage Duration should not be less than Excess Time + Inability to Access Time

ERROR MESSAGE: "Total Outage Duration can not be less than Excess Time + Inability to Access time".

6. If The Partial Outage Duration is provided, the Partial Impact must be filled.

ERROR MESSAGE: "Partial Impact Not Found"

7. If the Customer has provided Excess Time, the Excess Time Details should also be provided .

ERROR MESSAGE: "Excess Time Details Not Found"

8. If Amount of Service Affected is provided, the Type of Service Affected must be filled.

ERROR MESSAGE: "Type of Service Affected Not Found"

4 Detailed Subsystem Design / module / package level information

4.1 Class Diagram



DBConnectionUtil	DBPoolManager	TI9kSendMail

4.1 Database Logical/Physical/Dimensional ERD

4.2.1 tl_sots_email

Stores emails received via SOTS interface

Column Name	Null?	Data Type	РК	FK	Description
TL_SOTS_EMAIL_ID	NOT NULL	NUMBER	Yes	No	Sequence
SENDER_EMAIL	NOT NULL	VARCHAR2(255)	No	No	Email address of the sender
RECEIVE_DATE	NOT NULL	DATE	No	No	Date email was received
EMAIL_FILE_LOCATION	NULL	VARCHAR2(255)	No	No	Saves the location of Email
NUM_ATTACHMENTS	NOT NULL	NUMBER	No	No	Number of attachments in the email
ATTACHMENT_TYPE	NULL	VARCHAR2(1)	No	No	C – CSV, X – XML, O – other
CREATE_DATE	NULL	DATE	No	No	Date record was created
CREATED_BY	NULL	VARCHAR2(30)	No	No	Id of user/application who created records
UPDATE_DATE	NOT NULL	DATE	No	No	Date record was last updated
UPDATED_BY	NULL	VARCHAR2(30)	No	No	Id of user/application who updated records

4.2.2 tl_sots_file

Stores file from SOTS emails and header information found in the file

Column Name	Null?	Data Type	РК	FK	Description
TL_SOTS_FILE_ID	NOT NULL	NUMBER	Yes	No	Sequence
TL_SOTS_EMAIL_ID	NOT NULL	NUMBER	No	Yes	Maps to TL_SOTS_EMAIL table
SOTS_REVISION	NOT NULL NOT	NUMBER	No	No	SOTS revision in effect in the document
COMPANY_NAME	NULL	VARCHAR2(80)	No	No	Company Name
DATE_FILE_SENT	NOT NULL	DATE	No	No	Date attachment was sent Date [YYYY- MM-DD]
SEQUENCE_NUMBER	NULL	NUMBER	No	No	A unique sequence number to make submission unique (mandatory).
RESPONSE_EMAIL	NOT NULL NOT	VARCHAR2(255)	No	No	Email address to send any responses
RECORDSINFILE	NULL	NUMBER	No	No	Number of Records in File. It can be 0

Column Name	Null?	Data Type	РК	FK	Description
			1	1	
TEST_MODE	NULL	NUMBER	No	No	1 – true, 0 – false; false is assumed if blank
	NOT				
FILE_PROCESSING_STATUS	NULL	VARCHAR2(1)	No	No	C – Complete, P –Pending
	NOT				
CREATE_DATE	NULL	DATE	No	No	Date record was created
	NOT				
CREATED_BY	NULL	VARCHAR2(30)	No	No	Id of user/application who created records
	NOT				
UPDATE_DATE	NULL	DATE	No	No	Date record was last updated
	NOT				
UPDATED_BY	NULL	VARCHAR2(30)	No	No	Id of user/application who updated records

4.2.3 tl_sots_record

Stores records found in SOTS files

Column Name	Null?	Data Type	РК	FK	Description
TL_SOTS_RECORD_ID	NOT NULL	NUMBER	Yes	No	Sequence
TL_SOTS_FILE_ID	NOT NULL	NUMBER	No	Yes	Maps to TL_SOTS_FILE table
RECORD_PROCESS_STATUS	NOT NULL	VARCHAR2(1)	No	No	P – Pending, R – Ready for Extract, C – Extract Complete I-Inactive
OUTAGE_ID_NUM	NOT NULL NOT	VARCHAR2(15)	No	No	Identifier that is unique per company that can be used to reference the outage e.g. YY-NNNNN
RECORD_STATUS	NULL	VARCHAR2(10)	No	No	N – New, R – Revised , D – Deleted
COMPANY_NAME D&B_Number	NOT NULL NULL	VARCHAR2(50) NUMBER	No	No	Company Name - All records from a given company should always use the same spelling and case for their company name Dun & Bradstreet number for the specific organization within the company that experienced the outage
GEO_LOCATION_CODE	NULL	VARCHAR2(20)	No	No	Optional - example CLLI in United States SNJOCAMADS0
REPORT_DATE LOCATION_COUNTRY	NOT NULL NULL	DATE VARCHAR2(30)	No No	No No	Date the report was written. Need to be in the format Date [YYYY-MM- DD] Country Name for the NE
LOCATION_REGION	NULL	VARCHAR2(30)	No	No	State/Province/Region for the NE
LOCATION_CITY	NULL	VARCHAR2(30)	No	No	City for the NE
SITE NAME	NULL	VARCHAR2(50)	No	No	Site Name

Column Name	Null?	Data Type	РК	FK	Description
ORIGINATOR_LAST_NAME	NOT NULL	VARCHAR2(20)	No	No	Last Name of contact info
ORIGINATOR_FIRST_NAME	NOT NULL	VARCHAR2(20)	No	No	First Name of contact info
ORIGINATOR_PHONE	NOT NULL	VARCHAR2(20)	No	No	Phone number of contact info
ORIGINATOR_EMAIL	NOT NULL	VARCHAR2(50)	No	No	Email address of contact info
INCIDENT_DATE	NOT NULL	DATE	No	No	Date the incident BEGAN Need to be in the format Date [YYYY-MM-DD]
INCIDENT_TIME	NOT NULL	NUMBER	No	No	Time the incident began. SS=00 if minutes only available. Use International time convention, 24 Hour time [HH:MM:SS]
TOTAL_OUTAGE_DURATION	NOT NULL	NUMBER	No	No	Duration of total portion of outage Time [HHH:MM:SS.SS]
PARTIAL_OUTAGE_DURATION	NOT NULL	NUMBER	No	No	Duration of partial portion of outage
PARTIAL_IMPACT	NOT NULL	NUMBER	No	No	Percent of Element Affected, enter 100 for total; 25 for 911
EXCESS_TIME	NOT NULL	NUMBER	No	No	Excess time is excluded from Supplier Attributable calculations. See TL for examples: Technician Time 6.1.4.1 B4 [HH:MM] This reflects the amount of time that can be excluded from Product Attributable and applied to Customer Attributable. Comma delimited start and stop times.
EXCESS_TIME_DETAILS	NULL	VARCHAR2(4000)	No	No	Start1-stop1-why1, start2-stop2- why2,,startN-stopN-whyN should be used.
INABILITY_TO_ACCESS_TIME	NOT NULL	NUMBER	No	No	Inability to Access the NE time is counted as OTHER. See TL 6.1.4.3 b i 4
LIVE_SYSTEM	NOT NULL	VARCHAR2(1)	No	No	Y – true, N – false; Information on lab and precut systems should be marked "N"
MANUFACTURER	NOT NULL	VARCHAR2(30)	No	No	Supplier Name
MODEL_NAME_NUMBER	NOT NULL	VARCHAR2(40)	No	No	Equipment Name
CARD_NAME_NUMBER	NULL	VARCHAR2(40)	No	No	Name of the failing card
SOFTWARE_RELEASE	NOT NULL	VARCHAR2(40)	No	No	Software release Number
SYSTEM_TYPE	NULL	VARCHAR2(80)	No	No	Configuration of equipment (speed, channels, application, etc)(OC-xx,Opt Channels, xDSL)
HOST OR REMOTE	NOT NULL	VARCHAR2(30)	No	No	Applicable to Product Category 1.1 (Circuit Switch). The default value would be 'host'. Valid Values: Host, Remote

Column Name	Null?	Data Type	РК	FK	Description
CCS_OUTAGE_ONLY	NOT NULL	VARCHAR2(1)	No	No	Y – true, N – false
ADMIN_OUTAGE_ONLY	NOT NULL	VARCHAR2(1)	No	No	Y – true, N– false; If an Administrative outage occurs along with a Total NE outage this field should be set to 'N'.
SCHEDULED_EVENT	NOT NULL	VARCHAR2(1)	No	No	Y – true, N – false; Used to indicate if scheduled event or unscheduled event.
SERVICE_IMPACTING	NOT NULL	VARCHAR2(1)	No	No	Y – true, N – false; Did this failure cause a loss of service to end users?
AMT_SERVICE_AFFECTED	NOT NULL	NUMBER	No	No	Numerical value of amount of service affected
TYPE_SERVICE_AFFECTED	NOT NULL	VARCHAR2(20)	No	No	Normalization Units Affected: DS1s, OC- 48s, terminations, etc. Only a single unit can be reported.
OUTAGE_CLASSIFICATION	NOT NULL	VARCHAR2(30)	No	No	See outage classification list; don't use to assign "attributable to"
ATTRIBUTABLE_TO	NOT NULL	VARCHAR2(30)	No	No	Defines if the outage is attributable to the Product, Customer or is due to External causes
INSTALL_RELATED_OUTAGE	NOT NULL	VARCHAR2(1)	No	No	Y – true, N – false; If applicable [for EIO outages].
INSTALL_COMPANY_NAME	NULL	VARCHAR2(30)	No	No	If applicable [for EIO outages]
DESC_SERVICE_FAILURE	NULL	VARCHAR2(4000)	No	No	A narrative of FACTS as to what cause and or contributed to the failure
ROOT_CAUSE_ANALYSIS	NULL	VARCHAR2(4000)	No	No	A description of the root causes analysis and the resulting solution.
ORGANIZATION_TICKET_NUM	NULL	VARCHAR2(20)	No	No	Valid TAC ID Number
	NOT		No	No	If Y, the supplier Ticket Number must be
	NOLL	VARCHAR2(1)	No	No	Backward compatibility to support sots
	NOLL	NUMBER	No	No	
CREATED DY	NOLL	DATE	No	No	Id of percen (application who created record
CREATED_BY	NOLL	VARCHAR2(30)	No	No	Date when the second was last undeted
UPDATED DY	NOLL	DATE			Id of person (application who undeted as seed
UPDATED_BY	NULL	VARCHAR2(30)	NO	NO	id of person/application who updated record
1	I	I	I	I	1

5 Appendix A – Outage Classification Enumerated Values

Outage Classification Field Values

- HARDWARE FAILURE ٠
- DESIGN HARDWARE •
- DESIGN SOFTWARE •
- PROCEDURAL •
- PROCEDURAL SUPPLIER PROCEDURAL - 3rd PARTY
- LIGHTNING RELATED
- FACILITY RELATED •
- •
- POWER FAILURE COMMERCIAL POWER FAILURE BATTERY/GENERATOR •
- INTERNAL ENVIRONMENT •
- EXTERNAL ENVIRONMENT
- TRAFFIC OVERLOAD
- PLANNED EVENT •
- UNKNOWN
- UNDER INVESTIGATION •
- MAINTENANCE WINDOW

6 Appendix B – Proposed XML Schema for SOTS Processor

<?xml version="2.0" encoding="UTF-8"?>

```
<!--Header Information-->
```

<SQM version="2.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

<SOTSHeader>

<!--A unique id SequenceNumber to reference the submission -->
<SOTSRevision>1234</SOTSRevision>
<companyName> Cisco</companyName>
<DateFileSent> </DateFileSent>
<SequenceNumber>11011426</SequenceNumber>
<ResponseEmail>joe@jomail.com</ResponseEmail>
<RecordsinFile>5 </RecordsInfile>
<TestMode> False</TestMode>

</SOTSHeader>

<!--A for sots version2.0 -->

<SOTSInfo>

<OutageID>123 </OutageID> <RecordStatus>New or Revised or Confirmed or Deleted</RecordStatus> <CompanyName>cisco</CompanyName> <dbnumber>123</dbnumber> <GLC>sanjose</GLC> <ReportDate>2007-03-03</ReportDate> <Country>USA</Country> <Region>South</Region> <City>SanJose</City> <SiteName></SiteName> <origLastName>thomas</origLastName> <origFirstName>Sanya</origFirstName> <origPhone>1234567890</origPhone> <origEmail>1234567890</origEmail> <incidentDate>2007-03-03</incidentDate> <incidenttime>45</incidentTime> <overallDuration>400</overallDuration> <totalOutageDuration>45</totalOutageDuration> <partialOutageDuration>22</partialOutageDuration> <partialImpact>22</partialImpact> <excessTime>44</excessTime> <inabToAccessTime>44</inabToAccessTime> <liveSystem>Y</liveSystem> <manufacturer>cisco</manufacturer> <modelName>bongo</modelName> <cardName>bang</cardName> <swRelease>version-1 </swRelease> <systemType>version-1 </systemType> <host>host</host> <ccsOutage>Y</ccsOutage> <adminOutage>Y</adminOutage> <scheduleEvent>Y</sceduleEvent> <serviceImpacting>Y</serviceImpacting> <amtSvcAffected>5</amtSvcAffected> <typeSvcAffected>oc-48</typeSvcAffected> <outageClassification>Hardware Failure</outageClassification> <attributableTo>customer</attributableTo> <instRelatedOutage>Y</instRelatedOutage> <installCompName>ABC</installCompName> <descSvcFailure>thiswentdown</descSvcFailure>

<rootCauseAnalysis>explainthefix</rootCauseAnalysis>

<orgTicketNumber>abcdef</orgTicketNumber>

</SOTSInfo>

<!--A for sots version2.0 -->

<SOTSInfo>

<OutageID>123</OutageID> <RecordStatus>New or Revised or Confirmed or Deleted</RecordStatus> <CompanyName>cisco</CompanyName> <dbnumber>123</dbnumber> <GLC>sanjose</GLC> <ReportDate>2007-03-03</ReportDate> <Country>USA</Country> <Region>South</Region> <City>SanJose</City> <SiteName></SiteName> <origLastName>thomas</origLastName> <origFirstName>Sanya</origFirstName> <origPhone>1234567890</origPhone> <origEmail>1234567890</origEmail> <incidentDate>2007-03-03</incidentDate> <incidenttime>45</incidentTime> <totalOutageDuration>45</totalOutageDuration> <partialOutageDuration>22</partialOutageDuration> <partialImpact>22</partialImpact> <excessTime>44</excessTime> <excessTimeDetails>3,3,3,3 </excessTimeDetails> <inabToAccessTime>44</inabToAccessTime> <liveSystem>Y</liveSystem> <manufacturer>cisco</manufacturer> <modelName>bongo</modelName> <cardName>bang</cardName> <swRelease>version-1 </swRelease> <systemType>version-1 </systemType> <host>host</host> <ccsOutage>Y</ccsOutage> <adminOutage>Y</adminOutage> <scheduleEvent>Y</sceduleEvent> <serviceImpacting>Y</serviceImpacting> <amtSvcAffected>5</amtSvcAffected> <typeSvcAffected>oc-48</typeSvcAffected> <outageClassification>Hardware Failure</outageClassification> <attributableTo>customer</attributableTo> <instRelatedOutage>Y</instRelatedOutage> <installCompName>ABC</installCompName> <descSvcFailure>thiswentdown</descSvcFailure> <rootCauseAnalysis>explainthefix</rootCauseAnalysis> <orgContacted>Y</orgContacted> <orgTicketNumber>abcdef</orgTicketNumber>

</SOTSInfo> </SQM>