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BEFORE THE ARIZONA CORPORATION COMMISSION

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ARIZONA CORPORATION COMMISSION  
DOCKET CONTROL

Arizona Corporation Commission

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2  
3 **DOUG LITTLE**  
Acting Chairman  
4 **BOB STUMP**  
Commissioner  
5 **BOB BURNS**  
Commissioner  
6 **TOM FORESE**  
Commissioner  
7

8 **IN THE MATTER OF THE JOINT NOTICE AND**  
APPLICATION OF QWEST CORPORATION,  
9 **QWEST COMMUNICATIONS COMPANY, LLC,**  
QWEST LD CORP., EMBARQ  
10 **COMMUNICATIONS, INC. D/B/A**  
CENTURLINK COMMUNICATIONS,  
11 **EMBARQ PAYPHONE SERVICES, INC. D/B/A**  
CENTURLINK AND CENTURYTEL  
12 **SOLUTIONS, LLC, FOR APPROVAL OF THE**  
PROPOSED MERGER OF THEIR PARENT  
13 **CORPORATIONS, QWEST COMMUNICATIONS**  
INTERNATIONAL, INC., AND CENTURYTEL,  
14 **INC.**

**DOCKET NO. T-01051B-10-0194**  
**DOCKET NO. T-02811B-10-0194**  
**DOCKET NO. T-04190A-10-0194**  
**DOCKET NO. T-20443A-10-0194**  
**DOCKET NO. T-03555A-10-0194**  
**DOCKET NO. T-03902A-10-0194**

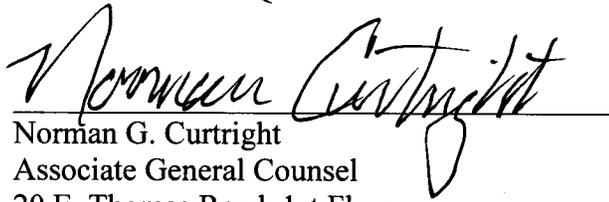
**NOTICE OF FILING**  
**COMPLIANCE TO SETTLEMENT**  
**AGREEMENT CONDITION NO. 19**

15  
16 CenturyLink hereby files notice of its plans to consolidate its Local Service Ordering and Billing  
17 systems across CenturyLink's markets. This notice is being provided in compliance with Condition No.  
18 19 of the Settlement Agreement among and between the Joint Applicants, the Commission Staff, and the  
19 Residential Utilities Consumer Office, approved and ordered by the Arizona Corporation Commission in  
20 Decision No. 72232. The details of the planned system consolidation are outlined in the attached letter  
21 to Thomas Broderick dated January 7<sup>th</sup>, 2016.

22 CenturyLink has notified all wholesale customers who will be affected by this effort and is  
23 utilizing the Change Management Process (CMP) to allow those carriers an opportunity to review the  
24 details of the plan and to provide comments and input.  
25

1  
2 RESPECTFULLY SUBMITTED, this 7<sup>th</sup>, day of January, 2016.

3  
4 QWEST CORPORATION d/b/a  
CENTURYLINK-QC

5 

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9  
10 ORIGINAL and thirteen (13) copies filed  
11 this 7<sup>th</sup>, day of January, 2016, with:

12 Docket Control  
13 ARIZONA CORPORATION COMMISSION  
14 1200 West Washington Street  
Phoenix, Arizona 85007

15 COPY of the foregoing hand-delivered  
16 this 7<sup>th</sup>, day of January, 2016, to:

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2 this 7<sup>th</sup>, day of January, 2016, to:

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January 7, 2016

Mr. Thomas M. Broderick  
Director – Utilities Division  
Arizona Corporation Commission  
1200 W. Washington St.  
Phoenix, Arizona 85007

RE: CenturyLink-Qwest Merger  
Docket Nos. T-01051B-10-0194, T-02811B-10-0194, T-04190A-10-0194, T-20443A-10-0194, T-03555A-10-0194, T-03902A-10-0194  
Merger Condition No. 19  
Proposed System Consolidation

Dear Mr. Broderick:

CenturyLink is consolidating its Local Service ordering and billing systems to streamline processes and systems across CenturyLink's markets. Due to acquisitions, CenturyLink currently operates two different ordering and billing systems for Local Services. As a result, wholesale customers that are in multiple locations within CenturyLink's network could be using both systems, making this inefficient for customers and for CenturyLink.

During consolidation, CenturyLink will move all Local Service Request (LSR) ordering to the Electronic Administration & Service Order Exchange (EASE) system and the associated billing to the Ensemble system. This consolidation will move properties off the Interconnect Mediated Access (IMA) and Customer Records Information System (CRIS) systems. The first phase of the Consolidation is planned for no earlier than December 2016. Phases two and three are planned for no earlier than mid and late 2017.

CenturyLink has notified affected Wholesale customers and has begun meeting the requirements of the Change Management Process (CMP) detailed in CenturyLink's Interconnection Agreements as well as merger-related settlement agreements. Most recently, CenturyLink filed a detailed "CenturyLink Local Service Ordering and Billing System Consolidation Plan" on January 4th in the CMP forum where CLECs will be able to review the plan and provide comments.

Mr. Thomas M. Broderick  
January 7, 2016  
Page 2

In compliance with CenturyLink's commitments made in the FCC's proceeding regarding the transfer of control of Qwest Communications International Inc. to CenturyLink<sup>1</sup>, CenturyLink is notifying the Commission and providing a copy of the detailed OSS integration plan. The CMP provides all affected CLECs the opportunity to provide comments, includes testing, and ultimately will lead to implementation in late 2016 after a vote of acceptance. Because of this, there is no specific requirement of the Commission regarding this change.

I would be happy to provide additional information about the CMP forum and how the Commission can participate or track the progress of this consolidation. Please contact me if you have any questions or wish to discuss this matter.

Sincerely,



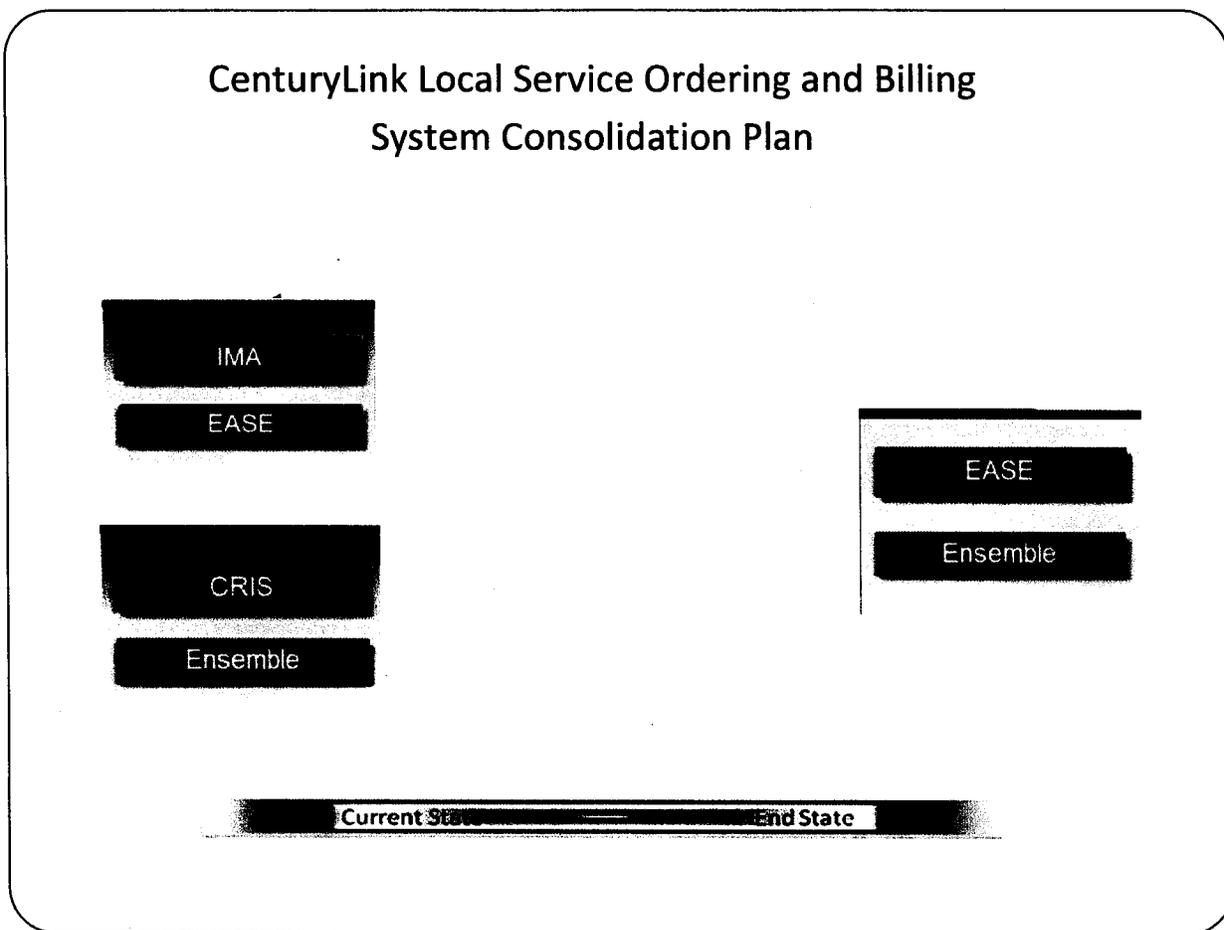
Attachment

Cc: Docket Control  
Brian Bozzo – Compliance and Enforcement

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<sup>1</sup> WC Docket No. 10-110, Appendix C, released March 18, 2011.

# CenturyLink Local Service Ordering and Billing System Consolidation Plan



### Document Modification Log

All revisions to this document are in chronological order.

Version	Date	Description of Change
1	1/4/2016	Initial Version of Plan with Eastern Consolidation dates specified

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# 1 Executive Summary

CenturyLink is consolidating Local Service ordering and billing systems to streamline processes and systems across CenturyLink's markets (hereafter, Consolidation). Due to Acquisitions (see Section 1.3), CenturyLink currently operates two different ordering and billing systems for Local Services. As a result, customers that are in multiple locations within CenturyLink's network could be using both systems making this inefficient for the customer and for CenturyLink.

During consolidation, CenturyLink will move all Local Service Request (LSR) ordering to Electronic Administration & Service Order Exchange (EASE) and the associated billing to Ensemble. (Refer to Section: 2: Ordering and Billing System Description for more information.) This consolidation will move properties off the Interconnect Mediated Access (IMA) and Customer Records Information System (CRIS).

The benefits to the wholesale customers and CenturyLink of consolidating the ordering systems across all CenturyLink Markets are to provide:

- Single standardized order entry channel for LSR services
- Standardized process for LSR handling
- Single view of all LSR orders
- One set of training requirements

The benefits to the wholesale customers and CenturyLink of consolidating the billing systems across all CenturyLink Markets are to provide:

- Single process for LSR billing functions
- Consistent billing levels – i.e. grouping of accounts across states
- Consistent method to view the billing for any products and services ordered on an LSR
- Consistent bill format for all local billing

To reduce the risks associated with a conversion, the conversion will be implemented in three phases, one CRIS region at a time.

## 1.1 Scope

The CenturyLink Local Service Ordering and Billing System Consolidation Plan (hereafter; the Consolidation Plan) document provides CenturyLink's wholesale customers, (hereafter; Customers) with further information about the Consolidation and how they will be affected.

The purpose of this document is to cover the scope of the Consolidation Plan to fulfill specific requirements of settlement agreements with various parties, as well as associated state commission and FCC orders, related to the CenturyLink/Qwest merger (hereafter, Merger Requirements). This document summarizes the critical milestones that will occur when CenturyLink consolidates the Current State Ordering and Billing Systems into the End State solution. The Consolidation is planned for no earlier than December 2016.

### 1.1.1 Items Not in Scope:

Items that are not in-scope for this project include, but are not limited to:

- Future system enhancements to EASE resulting from Local Service Ordering Guidelines (LSOG) updates beyond the upgrades specified in this project
- Access Service Request (ASR) processing

## 1.2 Assumptions

The following is a list of assumptions that are applicable during implementation and upon completion of the Consolidation:

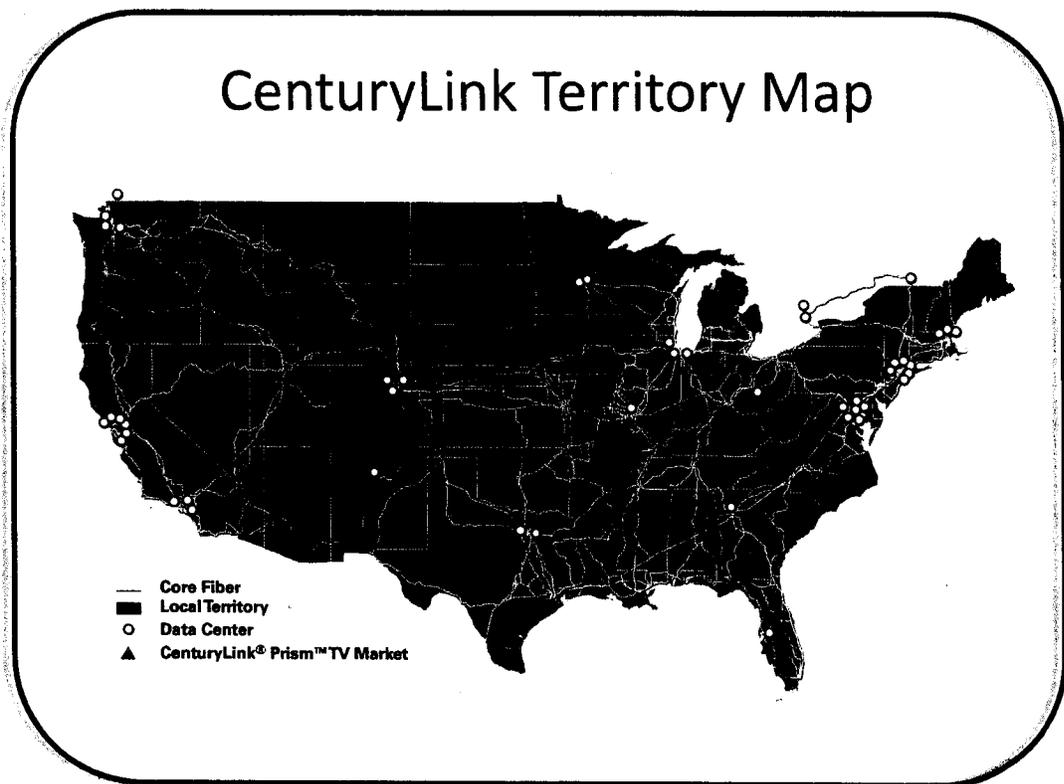
- CenturyLink will comply with all applicable Merger Requirements
- CenturyLink will utilize the existing Qwest Corporation d/b/a CenturyLink Change Management Process (CMP) to communicate system and product/process changes in the appropriate timing and format. CenturyLink will fully utilize CMP post Consolidation. To view the complete CMP document, visit the [CMP Website](#) or click on the [Wholesale Change Management Process Document](#) link
- The CMP timeline will be adjusted consistent with Merger Requirements
- Customers will enter LSRs in EASE and receive their bill output from Ensemble
- Customers will submit orders in LSOG (Issue 2Q14 Dated June 30, 2014) standard format and in 2<sup>nd</sup> version of XML format
- Completed IMA orders will continue to be available on-line for 24 months from the Consolidation date for inquiry
- CenturyLink will communicate billing account number changes to Customers before the Consolidation
- Historical data for Bill/CSRs will be available for duplicate bill requests for 13 months
- CenturyLink will retain existing output choices for billing media (i.e., paper vs. electronic) at consolidation
- Customers will not have to resend any In-Flight orders

In-Flight orders are:

When Customers submit orders and CenturyLink acknowledges acceptance, but the processing of the orders are not complete before the Consolidation weekend.

## 1.3 Historical Background

Strategic acquisitions are the primary contributor to CenturyLink's rapid growth. Pacific Telecom, Embarq, and Qwest are a just few of the companies acquired in recent years. CenturyLink also purchased a large number of access lines from GTE in 2000 and Verizon in 2002.



After the acquisition of Embarq in 2009, CenturyLink consolidated the Embarq Service Order Entry (SOE), Customer Records and Billing (CRB) to Ensemble. Embarq used the EASE Service Ordering System before acquisition. CenturyLink adopted Embarq's EASE Service Ordering System ordering into its Local Service Ordering system flow, replacing EZLocal for use in all of its markets at that time.

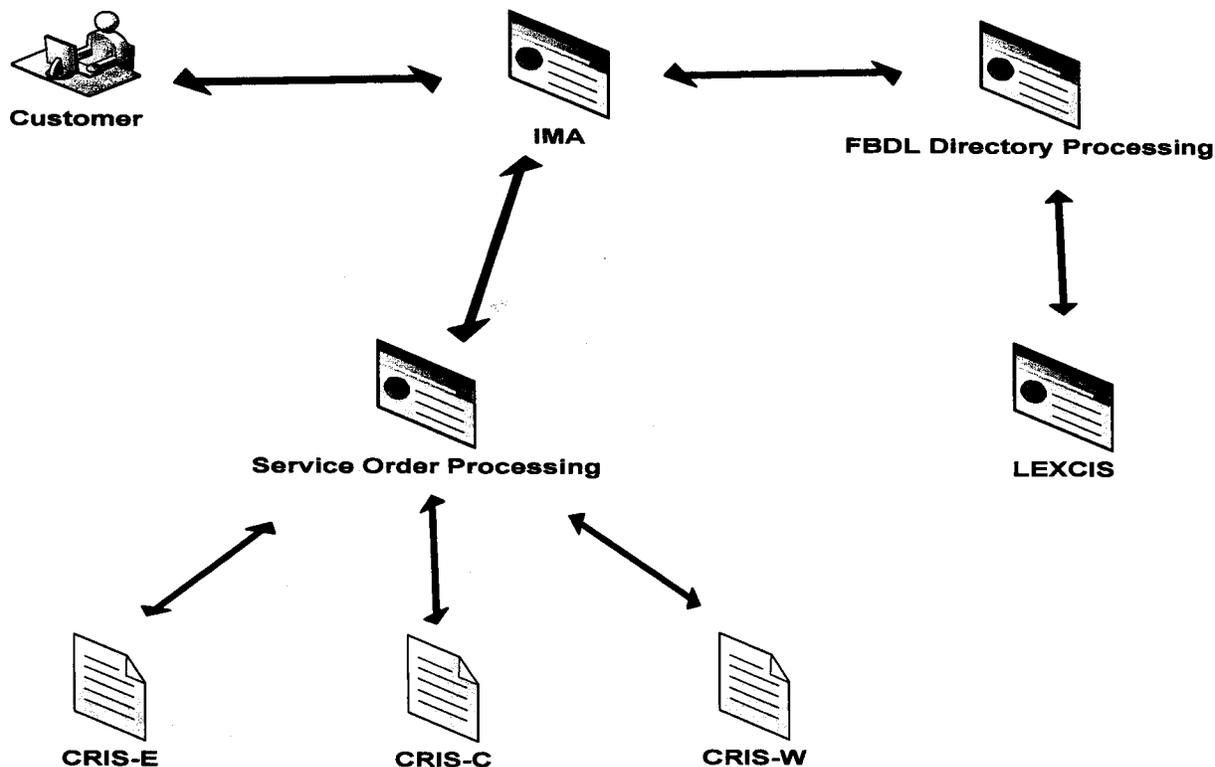
## 2 Ordering and Billing System Description

This section provides Customers with Current State and End State Ordering and Billing system views, common features, and information about the differences between Current State and End State systems. It also provides information about the functionality and applications that CenturyLink uses to facilitate Customer and system interfaces.

## 2.1 Current State System View

CenturyLink currently uses two separate Local Service Request Ordering and Billing Systems. CenturyLink uses both EASE and IMA for Local Service Request Ordering. CenturyLink uses Ensemble for billing. The diagram below depicts the current state system view for IMA Ordering and CRIS Billing.

### Current State System View



#### 2.1.1 CLEC ordering portal

IMA is the current LSR application supporting local service requests for wholesale customers in the Legacy Qwest markets of CenturyLink. IMA includes a GUI application for direct order entry of LSR orders and pre-order inquiries and the viewing of statuses and notifications. IMA also provides an electronic bonding gateway using XML to support system-to-system integration.

#### 2.1.2 Service Delivery

IMA interfaces to an application called FTS, which constructs an order in one of three regionalized core-ordering applications, called Service Order Processors (SOPs). The SOPs create the Universal Service Order, used by the Telcordia suite of provisioning systems to establish service.

### 2.1.3 Billing

The Service Order (S.O.) is transmitted from the Service Order Processor to the 3 CRIS regions for billing today.

### 2.1.4 Facility Based Directory Listing (FBDL)

Directory Listings are sent from IMA to the Qwest Directory Builder application, which creates and stores the directory listing based on LSR Directory requests.

Directory Listings are billed in the LEXCIS billing system.

### 2.1.5 Nationwide Customer Ordering & Billing

Century Link currently requires, based on end user location, the use of two different systems to deliver local service requests from wholesale customers, EASE and IMA. Multiple billing platforms are also used with different media and invoice formats.

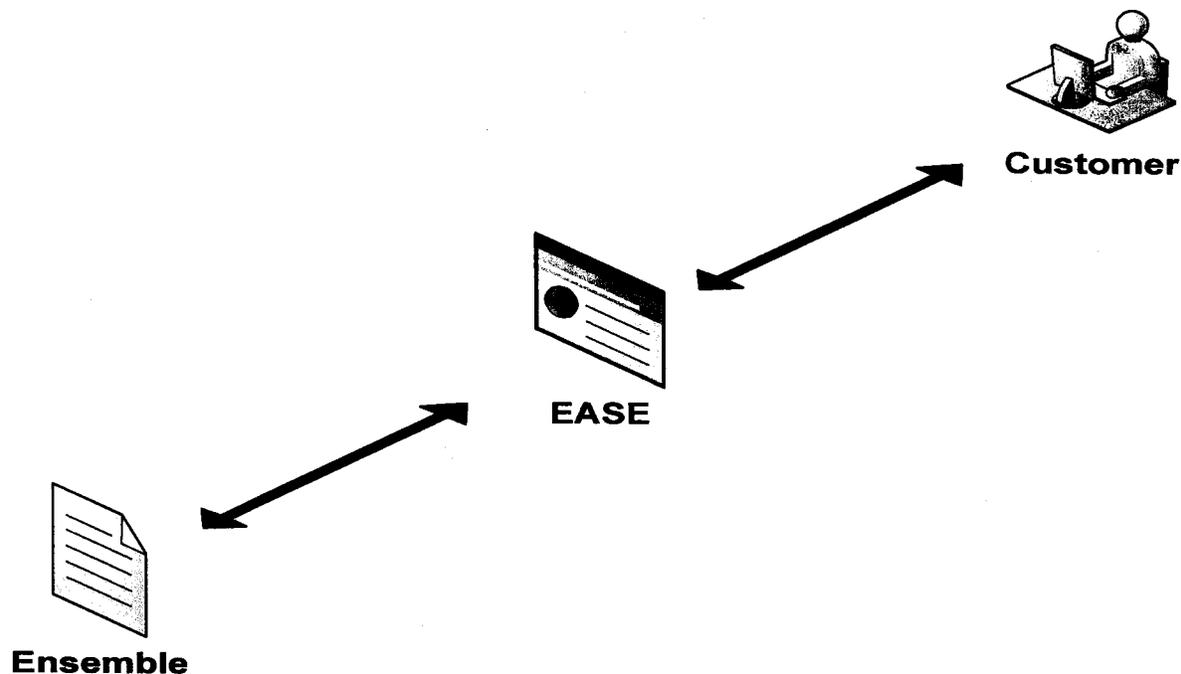
The graphic above illustrates the wholesale process and billing local service today.

## 2.2 End State System View

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### 2.2.1 Transition to common processes and system infrastructure

The following diagram depicts the End State Ordering and Billing System for all CenturyLink Markets.



### 2.2.2 EASE

EASE is the end state LSR ordering application to be used by Customers, as well as CenturyLink, allowing LSR processing via a GUI and batch files, and real-time XML transactions.

Included within EASE are:

- Edits
- Validations
- Pre-order information queries
- Status information

### 2.2.3 Ensemble

Ensemble is the end state system that creates the core service order and bills customers for services ordered through LSRs. Ensemble is integrated directly with EASE via an API. The core Ensemble service originates both the service delivery and billing processes. Ensemble also supports the directory listing fulfillment and billing processes.

Ensemble is the billing system application that is used to set up new customer services, facilitate billing services, provision some products and services, view customer information and many other customer-related services.

## 2.3 Local Service Ordering End State System - EASE

CenturyLink Customers use the Synchronoss based EASE system for LSR Ordering. Synchronoss, founded in 2000, specializes in software and services for Wireline and Wireless Telecommunications Carriers. Headquartered in Bridgewater, NJ, Synchronoss is a publicly traded company (NASDAQ: SNCR) with annual revenue for the fiscal year 2014 of approximately \$457M.

Synchronoss acquired the technology and assets that support the EASE platform as part of its overall acquisition of Wisor Telecom OSS in 2008. Since then, Synchronoss has continued to maintain, enhance, and market the platform supporting EASE.

EASE is an industry compliant order entry and workforce management system that allows end-to-end view and management of the LSR orders. The system consists of GUI and UOM/XML ordering capabilities. The system is robust and table driven with extensive business rule capabilities.

EASE follows industry-standard ordering business rules, including the twice-annual LSOG industry updates. EASE provides the following:

- Single, centralized platform for all LSR processing
  - Supports both eBonding and Portal (Virtual Front Office (VFO) GUI) capabilities
- Proven carrier-grade solution
  - Solutions are used by major carriers across the US and beyond, including major Incumbent Local Exchange Carriers (ILECs) and Competitive Local Exchange Carriers (CLECs)
  - Extensive features and functions for validation, delivery, and integration
- Compliance with LSOG/LSR industry standards and standard LSR configurations
  - Manages all LSOG updates going forward
- Integration with back office systems
  - Platform Application Programming Interface (API) will support additional integrations as needed for all LSR Order volumes.
- Platform Expandability
  - Local Number Portability (LNP) / Local Service Request (LSR) / Receive custom transaction types

### 2.3.1 Service Ordering Comparison – IMA to EASE (LSOG 2Q14)

The following matrices provide a comparison of current IMA functionality and EASE LSR functionality that will be available in user acceptance testing and deployed prior to conversion including planned development.

General Functionality	IMA	EASE
Support eBonding and portal for LSR requests	Yes	Yes
LSOG Ver 2Q14 Compliant	No	Yes*
Auto-populate initiator information from User Profile	Yes	Yes*
Field Level Help	Yes	Yes*
Error messaging – identifies form and fields	Yes	Yes*
Auto navigation to fields in error	No	Yes
Recapping from pre-order to order	Yes	Yes*
Multiple versions of XML	Yes	Yes*
Manage Users	Yes	Yes
Agent owner relationships	Yes	Yes

#### 2.3.1.1 Pre-Ordering

Pre-Order Functionality	IMA	EASE
Address Validation (by Street Address or TN)	Yes	Yes*
Appointment Scheduler Query (Select, Change, or Cancel)	Yes	Yes*
Carrier Facility Assignment Validation (Cable Facility, CFA Groups or Units queries)	Yes	Yes*
Customer Service Inquiry & Virtual Customer Service Inquiry Retrieval (by Street Address or TN)	Yes	Yes*
Directory Listing Inquiry (by Account TN, Listed TN, Non-Standard TN, Caption Name, or SLU Header TN)	Yes	Yes*
Design Layout Record Query (by Serial Number Circuit, TN Circuit, Carriers Facility Circuit, or Message Trunk Circuit)	Yes	Yes*
Facility Availability Validation (by TN, Address, or Circuit)	Yes	Yes*
Loop Qualification Query (by TN or Circuit)	Yes	Yes*
Meet Point Query (POTS Splitter or Cable Connection queries)	Yes	Yes*
Raw Loop Data Query (by TN, Address, or Circuit)	Yes	Yes*
Service Availability Query (by State and Service Type)	Yes	Yes*
TN Reservation Query (by Address and Custom TN selection criteria)	Yes	Yes*

\*Indicates some development may be required prior to CLEC testing

## 2.3.1.2 Ordering

Order Functionality	IMA	EASE
Create and submit a request	Yes	Yes
Revise and resubmit a rejected request	Yes	Yes
Supplement a request	Yes	Yes
Up front order editing	Yes	Yes
Search LSRs	Yes	Yes
Wildcard search	Yes	Yes
Order replication and template creation	Yes	Yes

## 2.3.1.3 Post Ordering

Post Order Functionality	IMA	EASE
Viewing and retrieving line loss information (by Account Number, Working TN, Circuit, Order number, PON, or Completion Date)	Yes	Yes
Status by LSR and/or Service Orders		
Error	Yes	Yes
Issued FOC	Yes	Yes
Jeopardy (LSR)	Yes	Yes
Jeopardy (Internal Service Order)	Yes	Yes*
Order Completed	Yes	Yes*
Physical Work Completed	Yes	Yes
Posted to be billed	Yes	Yes*
Rejected	Yes	Yes*
Request Completed	Yes	Yes*
Notification Inquiries		
BCN	Yes	Yes*
Bulk	Yes	Yes*
Completion	Yes	Yes*
Confirmation	Yes	Yes*
Error	Yes	Yes*
Jeopardy	Yes	Yes*
PSON	Yes	Yes*
Reject	Yes	Yes*
CFA Inventory	Yes	Yes*
Query for technician status and trouble ticket status	Yes	Yes*

\*Indicates some development may be required prior to CLEC testing

**Note:** Technical, legal and regulatory changes may affect information provided in the above table. Changes made following the introduction of this document in CMP are not reflected in the table above.

Follow the link to access LSOG: <http://www.atis.org/obf/download.asp>

## 2.4 Billing End State System

---

CenturyLink uses Ensemble to bill services ordered through an LSR.

Ensemble was developed by AMDOCS. AMDOCS is an industry leading billing and OSS platform provider. Many telecom providers, including AT&T, Sprint, T-Mobile and Bell Canada, use their software. AMDOCS has been in business for over 30 years and specializes in Software and Services for communications, media and entertainment industry service providers worldwide. They are particularly well known for their revenue management products.

AMDOCS is a publicly traded company (NASDAQ: DOX) with annual revenue for the fiscal year 2014 of approximately \$3.563B.

The Ensemble application is a full service ordering and billing suite currently supporting the legacy CenturyLink retail and wholesale customer base. The Ensemble application is fully integrated into legacy CenturyLink's accounting, regulatory reporting and service delivery platforms.

### 2.4.1 Billing System Comparison Functionality – CRIS to Ensemble

#### 2.4.1.1 Bill Format

Ensemble uses Price Plans and Feature codes for billing where CRIS uses USOCs (Universal Service Order Codes). The bill provides a Current Charges Summary section that lists Monthly, One-time and Usage charges. Where applicable, Department totals and a Department Summary by sub-department is presented. The Charge Detail section identifies charges (monthly and one-time charges) by Product-ID. Local Usage detail is provided when applicable. Lastly, an account summary page is presented.

The following table shows key capabilities of the System.

CRIS to Ensemble Billing System Integration	
Online Bill View	<p>CenturyLink will provide the Customer with an external link for up to 13 months of bill invoices. The Customer will be able to sign up for this access. This history will be built going forward after Consolidation.</p> <p>The current tool is My Account and will be moving to Control Center.</p>
Media Options	<p>Ensemble provides multiple options for receiving bills. Options include paper, online bill viewing, and EDI standard files.</p>
Invoices	<p>CenturyLink will continue to provide industry compliant invoices. Refer to separate attachment for Appendix A: Ensemble Invoice &amp; CSR Examples.</p>

**Note:** Technical, legal and regulatory changes may affect information provided in the above table. The table above does not reflect changes made following the introduction of this document in CMP.

## 2.4.2 Billing System Differences between CRIS to Ensemble

### 2.4.2.1 BANS

Ensemble uses a nine digit account number (i.e. 123456789), whereas CRIS uses a TN number format for the Billing Account Number (BAN). CenturyLink will provide the BAN conversion information prior to consolidation.

### 2.4.2.2 Bill Summary

Account, department, and sub-department summaries are available in the bill.

### 2.4.2.3 RSID/ZCID

Values from CRIS will be carried over to Ensemble.

**Note:** Technical Specifications will explain any electronic billing file differences, if applicable.

### 3 Consolidation Plan Implementation

The Consolidation Plan provides a framework for informing all participants about the Consolidation.

#### 3.1 Consolidation Plan Schedule and Milestones

##### 3.1.1 Conversion Approach

The overall conversion will be accomplished in phases, corresponding to the three regional CRIS systems:

- Eastern (IA, MN, NE, ND, SD)
- Western (OR, WA)
- Central (AZ, CO, ID, MT, NM, UT, WY)

##### 3.1.2 Schedule and Milestones

Consolidation completion for the Eastern region is 12/5/2016. Tentative target for the Western region is 2Q17 and Central region is 4Q17. CenturyLink will comply with all applicable Merger Requirements, including use of the CMP process. This document will be updated when target dates are available for the additional two phases.

The following table shows a list of milestones that impact the Consolidation Plan. CenturyLink will communicate updated milestone dates per the CMP process.

**■** = A milestone, established by the Merger Requirements, that alters the established CMP milestones schedule.

Consolidation Plan Milestone	Date
CMP CR Issuance: SCR110415-1, SCR110415-2, SCR110415-3, SCR110415-4	11/4/15
These can be found at: <a href="http://www.centurylink.com/wholesale/cmp/cr/crnumber_system_index.html">http://www.centurylink.com/wholesale/cmp/cr/crnumber_system_index.html</a>	
CR Presentation at CMP Meeting	11/18/15
LSR Consolidation Plan due	
Initial Release Notification (for SCR110415-1 and SCR110415-2)	1/4/16
Initial Retirement Notice (for SCR110415-3 and SCR110415-4)	1/4/16
LSR Consolidation Plan Review Meeting	
Extended Customer Comment Window for Initial Release Notification, Initial Retirement Notice and Consolidation Plan	
CenturyLink issues response to CLEC comments and Final Retirement Notice, including the Final version of the LSR Consolidation Plan	
3 <sup>rd</sup> Party Facilitator Selected	

Consolidation Plan Milestone	Date
Draft Interface Tech Specs	4/8/16
Tech Specs Walk-through	4/19/16
CLEC Comments for Interface Tech Specs	4/25/16
Final Interface Tech Specs	4/29/16
L&P Volume Testing	6/6/16
(New) GUI Initial Release notice	6/23/16
(New) GUI Draft Release notes	7/8/16
Product Process Notification associated with Level 2 OSS changes	7/8/16
CLEC comments due on (New) GUI Release Notes	7/11/16
CLEC comments due on Level 2 OSS Product Process changes	7/15/16
Training available	7/15/16
GUI Final Release Notice	7/15/16
Final Notice For Level 2 OSS Product/Process Changes	7/22/16
Customer Testing Begins with LSR Consolidation Functionality (120 Days)	7/27/16
Customer Testing Ends	10/26/16
Customer Go/No Go Vote	12/1/16
Eastern Region Release to Production	12/5/16

### 3.2 3<sup>rd</sup> Party Facilitator

In accordance with the Merger Requirements, CenturyLink will contract with a 3<sup>rd</sup> Party Facilitator to coordinate between companies during planning and execution of Customer Testing. Refer to Section 3.3.3: Customer Testing.

The 3<sup>rd</sup> Party Facilitator will be engaged in 1Q2016. The CLECS will have the opportunity for input on the 3<sup>rd</sup> Party Facilitator requirements. The Facilitator will assist in Customer Testing scenario development and be available during the 120-day Customer Testing period which begins in 3Q2016.<sup>1</sup>

### 3.3 Consolidation Plan Implementation

This section provides further details on the Consolidation Plan implementation, including testing, training, the conversion weekend consolidation plan, and contingency planning.

#### 3.3.1 Internal CenturyLink Consolidation Testing

CenturyLink will execute test orders through EASE to ensure that proper billing codes assignment occurs and the orders flow successfully into Ensemble for

<sup>1</sup> See *In the Matter of the Joint Petition for Approval of Indirect Transfer of Control of Qwest Operating Companies to CenturyLink, Minnesota Public Utilities Commission, Docket No. p-421, et al./PA-10-456, Settlement Agreement between the Joint Petitioners and Joint CLECs, March 4, 2011.*

billing. CenturyLink business SMEs (Subject Matter Experts) will check for accuracy and completeness.

The following is the standard process that CenturyLink has used for previous consolidations and will use for this system consolidation:

- First, internal testing consisting of 'mock' conversions from CRIS into Ensemble prior to the Customer testing period will be iteratively executed.
- Test bills will be generated and compared to production Ensemble bills for accuracy.

Automated comparisons will occur for all circuits/products that are on the account, all monthly recurring charges, taxes, and any in-flight activity such as pending payments, one time charges and disputes. CenturyLink resources will investigate fallout and issues during the comparison process and update the processes/programs to achieve billing accuracy.

CenturyLink SMEs from EASE/IMA and CRIS/Ensemble systems and process areas will participate in testing and validation efforts. In addition, contract resources will supplement these internal resources to ensure intense focus on Consolidation activity and to allow 24-hour cycles.

### 3.3.2 Training and Process Plan

Per the Merger Agreement, CenturyLink will provide Customer training and education without charge.

For the Consolidation, CenturyLink will provide the following:

- CenturyLink will provide updated EASE Customer training
- CenturyLink will conduct a Customer walk through session prior to the start of Customer testing
- An additional Customer walk-through of the training will be conducted before Consolidation
- CenturyLink will provide updated external documentation prior to the beginning of the Customer testing phase

### 3.3.3 Customer Testing

In accordance with the Merger Agreement, CenturyLink will make available a testing environment at the appropriate time for the Customers to test orders into the EASE ordering system. A testing schedule will allow the generation of test bills and CSRs at scheduled intervals during the 120-day testing window. Before testing begins, the process to log and track defects will be communicated.

### 3.3.4 Load & Performance (L&P) Testing

CenturyLink completed an analysis of the increased demand on EASE to process IMA transactions. To meet the needs of the expected volume from this analysis, EASE processing capability was increased. CenturyLink modifies processing capacity by using internal virtual server environments allowing CenturyLink to respond quickly to capacity issues.

In addition to the completed performance analysis, CenturyLink will perform a Load & Performance test on EASE based on the anticipated needs after the IMA volume is included. Specifically:

- The Load & Performance test will be conducted prior to Consolidation, but no later than end of 3Q2016
- The combined LSR transaction volume for the preceding 36 months will be made available to Customers
- The highest monthly volume of aggregate transactions for the preceding 12 months will serve as the testing baseline
- Using the highest monthly volume, a single day's average transaction volume of LSRs will be calculated
- 125% of the single day's transaction volume will be processed and performance metrics captured
- These metrics will be available to Customers

### 3.3.5 Production Conversion Plan

The overall Consolidation from ordering through billing will be implemented in three phases: Eastern, the weekend of December 2, 2016, and two more conversions for Central and Western regions in 2017. These conversions will be flash cuts of the IMA and CRIS applications that are in use for that region prior to the conversion. The EASE LSR and Ensemble applications will then be in use for that region post-conversion. This means that Customers will submit orders via IMA pre-Consolidation weekend and new orders post-Consolidation will go into EASE. The weekend Consolidation cutover will be for all properties in the impacted regions. The Consolidation weekends will be scheduled near the end of a month following the completion of all billing cycles for that month, and before any billing cycles executed in the following month.

Customers' will receive notifications of the Consolidation's extended weekend maintenance window. There will be a live bridge open at CenturyLink with key CenturyLink resources that will be available to immediately investigate and address any concerns once the production systems are back online. Customers will receive issue ticket logging and escalations processes prior to the Consolidation weekend. At Consolidation, all existing products billed in CRIS will convert and all new bills will be generated from Ensemble for the impacted region.

### 3.3.6 Contingency Plan

A backup of all relevant source and target databases will occur at the beginning of the extended maintenance window immediately as part of conversion. Once these backups complete successfully, consolidation activities will begin. The Ensemble database will contain CRIS products, in-flight orders will be contained in the end state databases and internal validation will occur.

In the event of catastrophic issues with the production system during consolidation weekend, the original databases' pre-consolidation state restoration would occur through a predefined back-out plan. The implementation of this plan would only occur in the event of catastrophic issues with the production system during that weekend. In the unlikely event this back-out plan is

required, the decision would be made in time to have the systems available on the Monday following consolidation weekend.

Once the consolidation is complete and validated, source databases will be modified to 'read only' to allow view capability where applicable.

## Appendix A: Ensemble Invoice & CSR Examples (Redacted)

CRIS Redacted Resale Bill:



CRIS BILL.docx

Ensemble Redacted Resale Bill:



ENSEMBLE BILL.docx

## Appendix B: Regulatory Organizations, Guidelines and Standards

The following is a list of regulatory organizations, guidelines and industry standards mentioned in this document.

- LSOG (Local Service Ordering Guidelines)
  - <http://www.atis.org/obf/download.asp>
- CMP (CenturyLink Change Management Process)
  - <http://www.centurylink.com/wholesale/cmp/review.html>
- FCC (Federal Communications Commission)
  - [www.fcc.gov/](http://www.fcc.gov/)
- PUC (Public Utility Commissions)
  - The following link is to the National Association of Regulatory Utility Commissioners. You will be able to obtain information about Public Utilities Commissions by State  
<http://www.naruc.org/Commissions/>

## Appendix C: Glossary

The glossary lists terms and acronyms used in this document with descriptions and definitions.

Term/Acronym	Description/Definition
API	Application Programming Interface
BAN	Billing Account Number
CFA	Carrier Facility Assignment
CLEC	Competitive Local Exchange Carrier
CMP	Change Management Process
CRB	Customer Records and Billing
CRIS	Customer Records and Information System
CSR	Customer Service Records
Current State System View	Denotes CenturyLink's existing systems and their functionality pre-Consolidation
EASE	Electronic Administration & Service Order
End State System View	Denotes CenturyLink's systems and functionality post Consolidation
FBDL	Facility Based Directory Listing
FCC	Federal Communications Commission (USA)
GUI	Graphical User Interface
ILEC	Incumbent Local Exchange Carrier
IMA	Interconnect Mediated Access
LEC	Local Exchange Carrier
LEXCIS	Local Exchange Carrier Invoice System
LNP	Local Number Portability
LSOG	Local Service Ordering Guidelines
LSR	Local Service Request
NC	Network Channel
NCI	Network Channel Interface
OSS	Operating Service System
PUC	Public Utility Commissions
RLEC	Rural Local Exchange Carrier
S.O.	Service Order
SOE	Service Order Entry
UOM	Uniform Ordering Model

USOC	Universal Service Order Code
VFO	Virtual Front Office
WTN	Working Telephone Number
XML	eXtensible Markup Language

## Appendix D: Document Authors

The table below lists the qualifications of the document authors including information technology professionals with substantial experience and knowledge regarding CenturyLink systems, process, and requirements.

Title	Years of Telco Experience	Service in CenturyLink	Service in Qwest	Role in Preparation of Consolidation Plan
Director Access Billing	17	17	0	Access Billing
Director IT Conversion	20	20	0	IT Conversion and Architecture
Director Wholesale Ordering, Enterprise eBilling & CPE Development	26	4	13.5	Director Wholesale Ordering, Enterprise eBilling & CPE Development
Director of Wholesale Support	32	32	0	Reviewer to ensure compliance with merger commitments
Director Wholesale Technical Support	25	4	21	OSS & Technical Support
Lead Process Analyst	30	4	26	Change Management Process, Lead Process Analyst
Lead Witness	16	4	12	Qwest Merger Commitments SME
Manager Credit Management	35	4	31	Qwest Billing Process SME
Manager Program / Project Management - Ordering	26	26	0	Manager Program / Project Management - Ordering
Manager Program / Project Management - Wholesale	21	4	17	Manager Program / Project Management - Wholesale
Sr. Lead Analyst	33	4	29	Qwest Change Management Process, Sr. Lead Analyst
Sr. Lead Process Analyst	35	4	31	Qwest Billing Process
Sr. Lead Project Manager	15	4	11	Overall Project Manager for completion of the Consolidation Plan