

2020 Census Systems Readiness

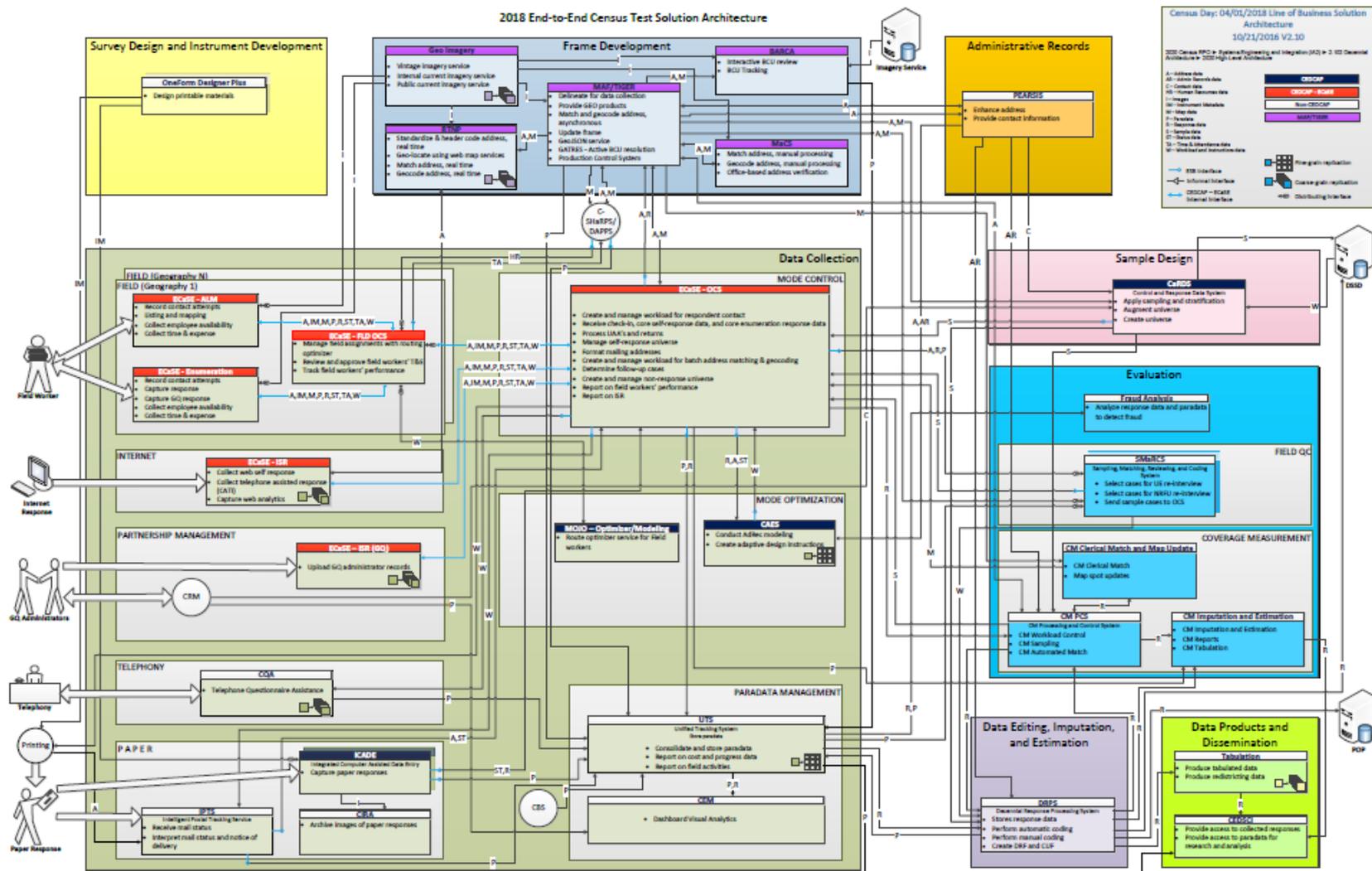
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2020 Census Systems Readiness

- 2018 End-To-End Census Test Solution Architecture
- Status of Systems Supporting the 2018 End-To-End Census Test
 - Census Enterprise Data Collection and Processing (CEDCaP) Systems

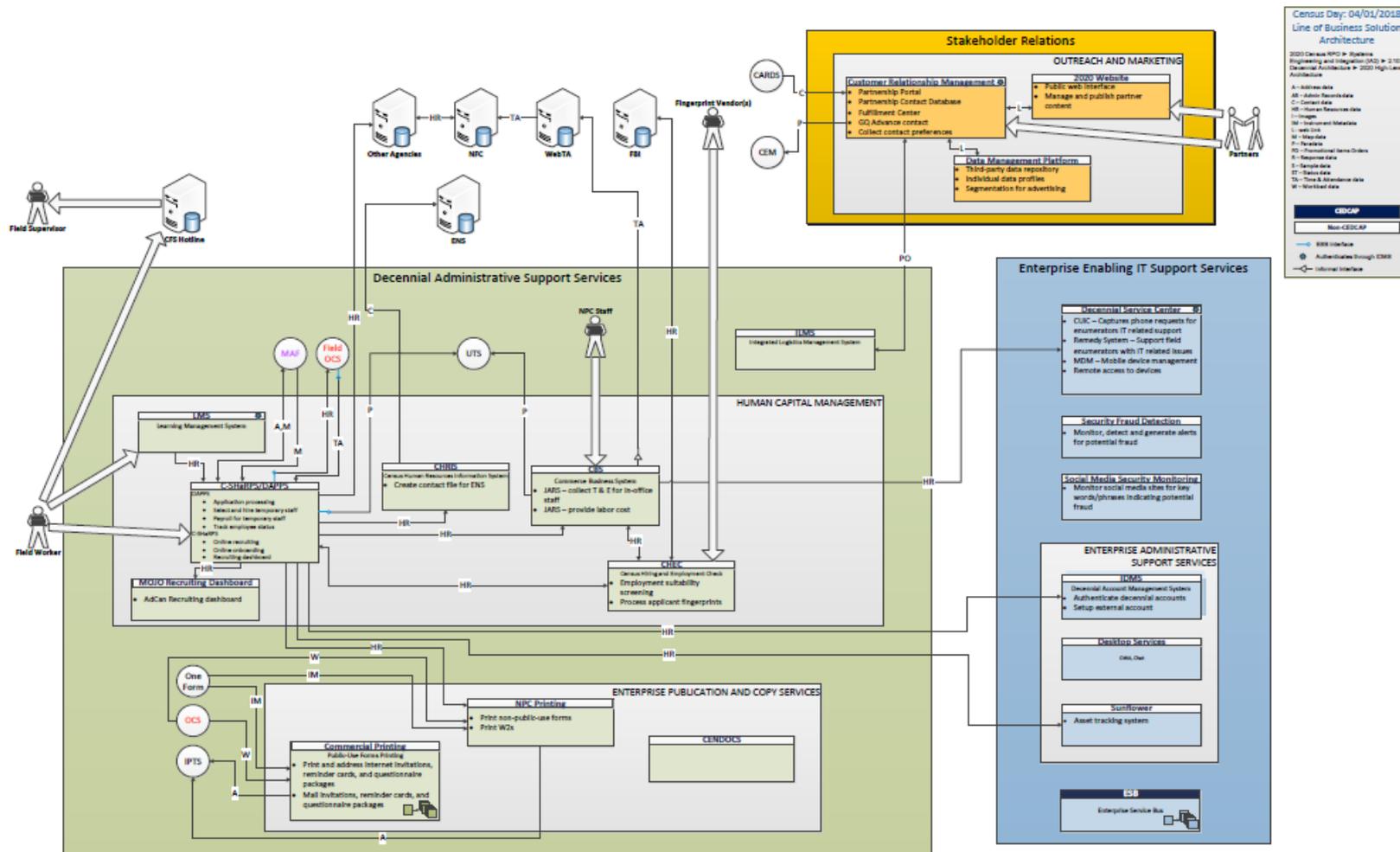
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2018 End-To-End Census Test Solution Architecture



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2018 End-To-End Census Test Solution Architecture (continued)



2020 Census Systems Readiness

Non-CEDCaP Systems

Non-CEDCaP System	Key Efforts/Updates required for 2018/2020
2020 Website	Develop enhancements and deploy in support of the 2018 End-to-End Census Test IPC operation. Possible scalability updates are required to support 2020.
CEDCSI (Center for Enterprise Dissemination Services and Consumer Innovation)	Establish interfaces with 2018 End-to-End Census Test systems. Possible scalability updates are required to support 2020.
CEM (Customer Experience Management)	Develop enhancements and deploy in support of the 2018 End-to-End Census Test IPC operation. Possible scalability updates are required to support 2020.
CM Clerical Match and Map (Coverage Measurement – Clerical Matching System and Map Update)	Develop and deploy in support of 2018 End-to-End Census Test Coverage Measurement (CM) operation.
CM Imputation and Estimation (Coverage Measurement – Imputation and Estimation System)	Develop and deploy in support of 2018 End-to-End Census Test CM operation.
CM PCS (Coverage Measurement – Processing and Control System)	Develop and deploy in support of 2018 End-to-End Census Test CM operation.
CRM (Customer Relationship Management)	Update platform and develop enhancements . Deploy in support of 2018 End-to-End Census Test IPC operation. Possible scalability updates are required to support 2020.

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Non-CEDCaP Systems (continued)

Non-CEDCaP System	Key Efforts/Updates required for 2018/2020
CQA (Census Questionnaire Assistance)	Establish interfaces with 2018 End-to-End Census Test systems. Develop and deploy in support of the 2018 End-to-End Census Test Self-Response operation. Scalability updates are required to support 2020 Census.
C-SHaRPS (Census Schedule A Hiring, Recruiting and Payroll System)	Award contract. Develop and deploy for 2018 End-to-End Census Test Enumeration Recruiting Release.
DAPPS (Decennial Applicant, Personnel and Payroll System)	Migrate to Cloud. Develop and deploy interface with C-SHaRPS for 2018 End-to-End Census Enumeration Recruiting Release. Verify benefits implementation for fulfilling Affordable Care Act. Scalability updates are required to support 2020 Census.
IPTS (Intelligent Postal Tracking System)	Complete Analysis of Alternatives to determine the postal-tracking solution for the 2018 End-to-End Census Test and the 2020 Census.
LMS (Learning Management System)	Award contract. Develop and deploy online training for all field enumeration activities.
MAF/TIGER (Master Address File/Topologically Integrated Geographic Encoding and Referencing Database)	Develop and deploy collection geographies. Provide address and geospatial services for all operations.
RTNP (Real Time Non-ID Processing)	Verify cloud deployment in the production environment in support of the self-response operation. Scalability updates are required to support 2020 Census.

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Non-CEDCaP Systems (continued)

Non-CEDCaP System	Key Efforts/Updates are required for 2018/2020
DRPS (Decennial Response Processing System)	Develop enhancements and deploy in support of response processing operation. Scalability updates are required to support 2020 Census.
MOJO (Recruiting Dashboard)	As-Is system. C-SHaRPS may provide functionality beginning with the enumeration recruiting release.
PEARSIS (Production Environment for Administrative Records Staging, Integration and Storage)	Develop enhancements and deploy in support of response processing operation. Scalability updates are required to support 2020.
Tabulation (Decennial Tabulation System)	Establish interface with 2018 End-to-End Census Test systems , develop and deploy enhancements required to support the 2018 End-to-End Census Test. Possible scalability updates are required to support 2020 Census.
UTS (Unified Tracking System)	Develop enhancements and deploy in support of 2018 End-to-End Census Test. Scalability updates are required to support 2020 Census.

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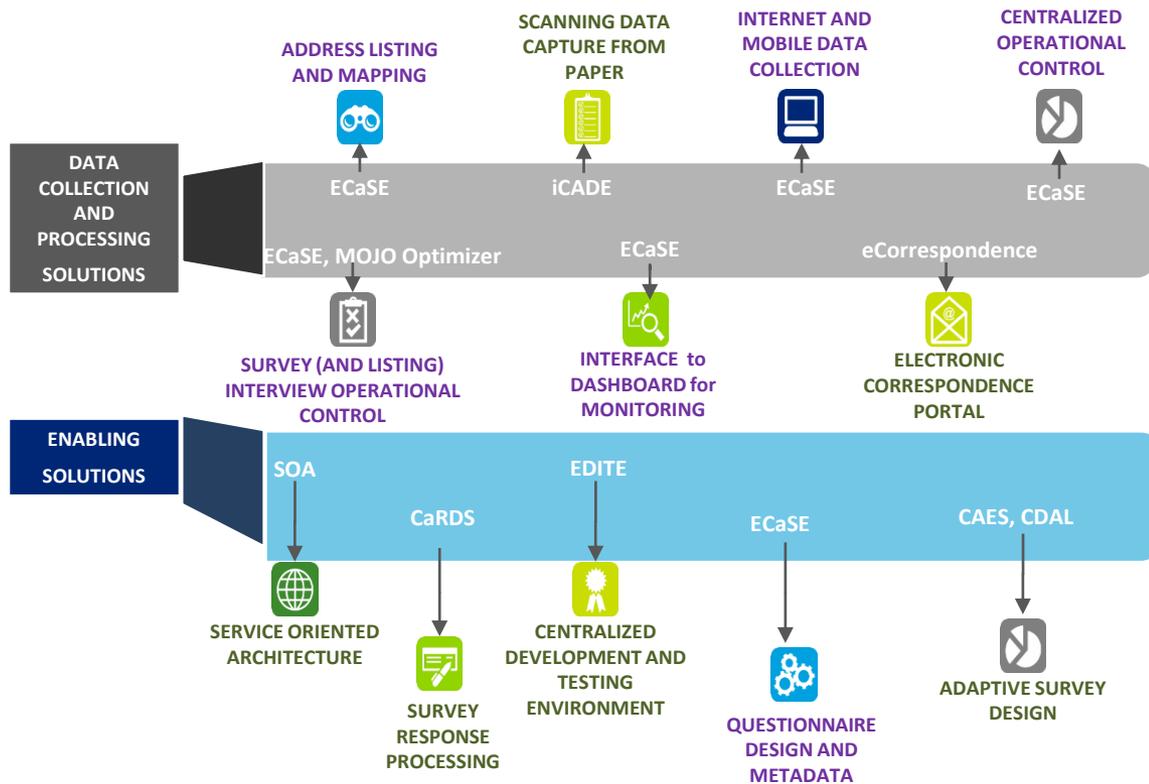
Non-CEDCaP Support Systems

Non-CEDCaP System	Key Efforts/Updates required for 2018/2020
CBS (Commercial Business System)	As-Is system, no functionality updates are required for its 2018/2020 baseline scope. Some updates may be required when interfacing systems (such as DAPPS) migrate to the cloud.
CENDOCs (Census Document System)	As-Is system, no functionality updates are required for its 2018/2020 baseline scope.
CHEC (Census Hiring and Employment Check System)	Third party vendor interface needs to be implemented once the fingerprinting contract is awarded. Scalability updates are required to support 2020 Census.
CHRIS (Census Human Resources Information System)	As-Is system, no functionality updates are required for 2018/2020 baseline scope. Some updates may be required when interfacing systems (such as DAPPS) migrate to the cloud.
CIRA (Census Image Retrieval Application)	As-Is system, no functionality updates are required for its 2018/2020 baseline scope. Scalability updates are required to support 2020 Census.
Commercial Printing	Award to a GSA vendor. Develop interface with 2018 End-to-End Census Test systems.
IDMS (Identity Management System)	As-Is system, no functionality updates are required for its 2018/2020 baseline scope. Scalability updates are required to support 2020 Census.
ILMS (Integrated Logistics Management System)	Finalize baseline scope. Develop interface with 2018 End-to-End Census Test systems in support of IPC. Possible scalability updates are required to support 2020.
NPC Printing (Printing at the National Processing Center)	As-Is system, no functionality updates are required for its 2018/2020 baseline scope.
Sunflower	As-Is system, no functionality updates are required for its 2018/2020 baseline scope.

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Census Enterprise Data Collection and Processing (CEDCaP) Capabilities and Solutions

CEDCaP is comprised of delivery of enterprise capabilities and the solutions to provide those capabilities.



Capabilities shown in purple will be provided by the Enterprise Censuses and Surveys Enabling (ECaSE) Platform

Census Enterprise Data Collection & Processing (CEDCaP)

CEDCaP Data Collection & Processing Capabilities and Solutions Delivered:	
CEDCaP Capability	CEDCaP Solution
1) Centralized Development and Testing Environment to CEDCaP projects	Enterprise Development, Integration, & Test Environment (EDITE)
2) Service Oriented Architecture for CEDCaP projects (i.e., common infrastructure and efficient system interfaces to allow IT applications to communicate without the need for costly system re-writes)	Application Programming Interface (API) Infrastructure (API-I)
3) Centralized Operational Analysis and Control and Adaptive Survey Design capability, including statistical modeling and administrative records	ECaSE Operational Control System Census-Data Access Layer (C-DAL) Concurrent Analysis and Estimation System (CAES)
4) Survey (and Listing) Interview Operational Control	ECaSE Operational Control System MOJO Optimizer
5) Address Listing and Mapping	ECaSE Address Listing Mapping
6) Interface to the Dashboard for Monitoring Survey Cost, Progress, and Quality and Enterprise Paradata Repository	ECaSE
7) Questionnaire Design and Metadata	ECaSE- Questionnaire Design Metadata
8) Internet and Mobile Data Collection	ECaSE Internet Self Response ECaSE – Enumeration
9) Electronic Correspondence Portal	eCorrespondence
10) Scanning Data Capture from Paper	Integrated Computer Assisted Data Entry (iCADE)
11) Survey Response Processing	CARDS (Pre-data collection, TBD) (Post-data collection processing)

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CEDCaP Systems

CEDCaP System	Key Efforts/Updates required for 2018/2020
CaRDS (Control and Response Data System)	Develop enhancements to functionality that supported the 2015 and 2016 Census Tests. Deploy in support of Census Universe Creation for 2017 Census Test and 2018 End-to-End Census Test. Scalability updates are required to support 2020.
iCADE (Integrated Computer Assisted Data Entry System)	Develop enhancements to legacy system that supports current surveys and the 2015 and 2016 Census test. Deploy in support of paper data capture operation for 2017 Census test and 2018 End-to-End Census Test. Scalability updates are required to support 2020.
SOA (Service Oriented Architecture)	Develop enhancements to production system to support interfaces between ECaSE in the Cloud and those systems not in the Cloud.
CAES (Concurrent Analysis and Estimation)	Conduct tests, finalize 2020 Census models that will run on CAES, and obtain an ATO in order to support the 2018 End-to-End Census Test.
ECaSE (Enterprise Censuses and Surveys Enabling)	Complete the configuration of Internet Self-Response and Operational Control functionality to support the 2017 Census Test and Address Listing and Enumeration instruments for the 2018 End-to-End Census Test. Scalability updates are required to support 2020.