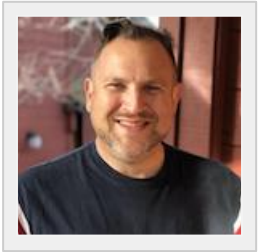
California Community Colleges

CCC Data: Connecting Colleges with Data

CISOA Virtual Technology Summit

Introductions



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CCC Data

Supported by the Data Services Program (DSP) initiative from the California Community Colleges Chancellor's Office, CCC Data provides our Colleges with access to critical data used to support institutional decision-making aligned with the CCCCO Vision for Success.

California Community Colleges
Chancellor's Office

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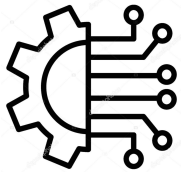
Agenda

- Overview
- Flow of Data
- Available Data Sources
- Accessing the Data Warehouse
- Project Update
- Stakeholder Engagement
- Next Steps
- Discussion

CCC Data Overview



Data Pipelines

- Several proven methods available to integrate data with CCC Data
- Extract, Transform, and Loads data
- Runs nightly (or more frequently)

CCC Data Warehouse

- Structured source of master data segmented by MIS code
- Connects data to generate reports and analytics for end-users
- Built on Amazon AWS Redshift

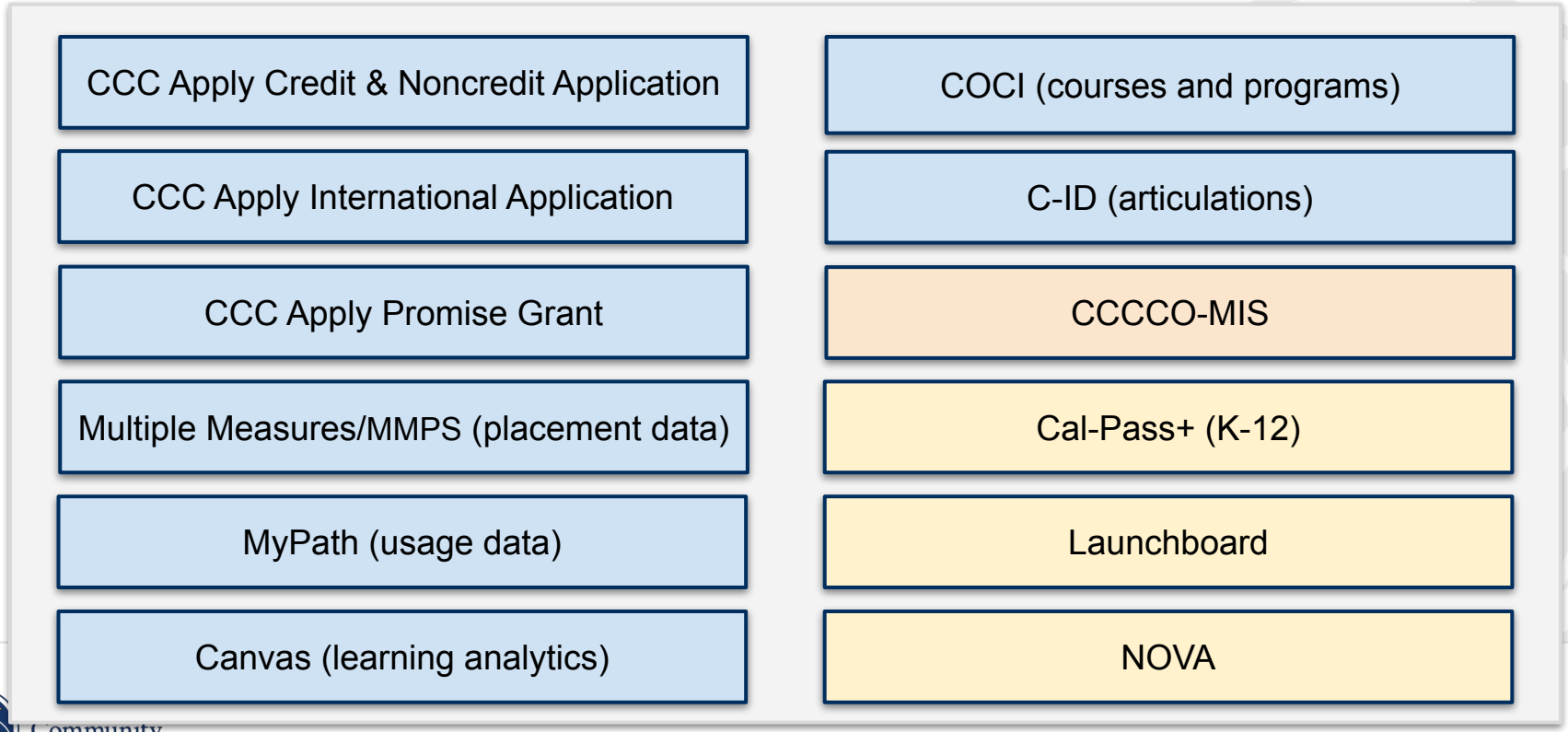
CCC Data Lake

- Collects data, preserving changes
- Used to power Data Warehouse, Data-Marts, and analytics
- Built on Amazon AWS S3

Data Warehouse Connections

- Colleges may connect local BI/ analytics tools or use the DW Report Server
  - ➢ Direct (ODBC/JDBC) Connection
  - ➢ CCC Data Report Server

Available Data Sources



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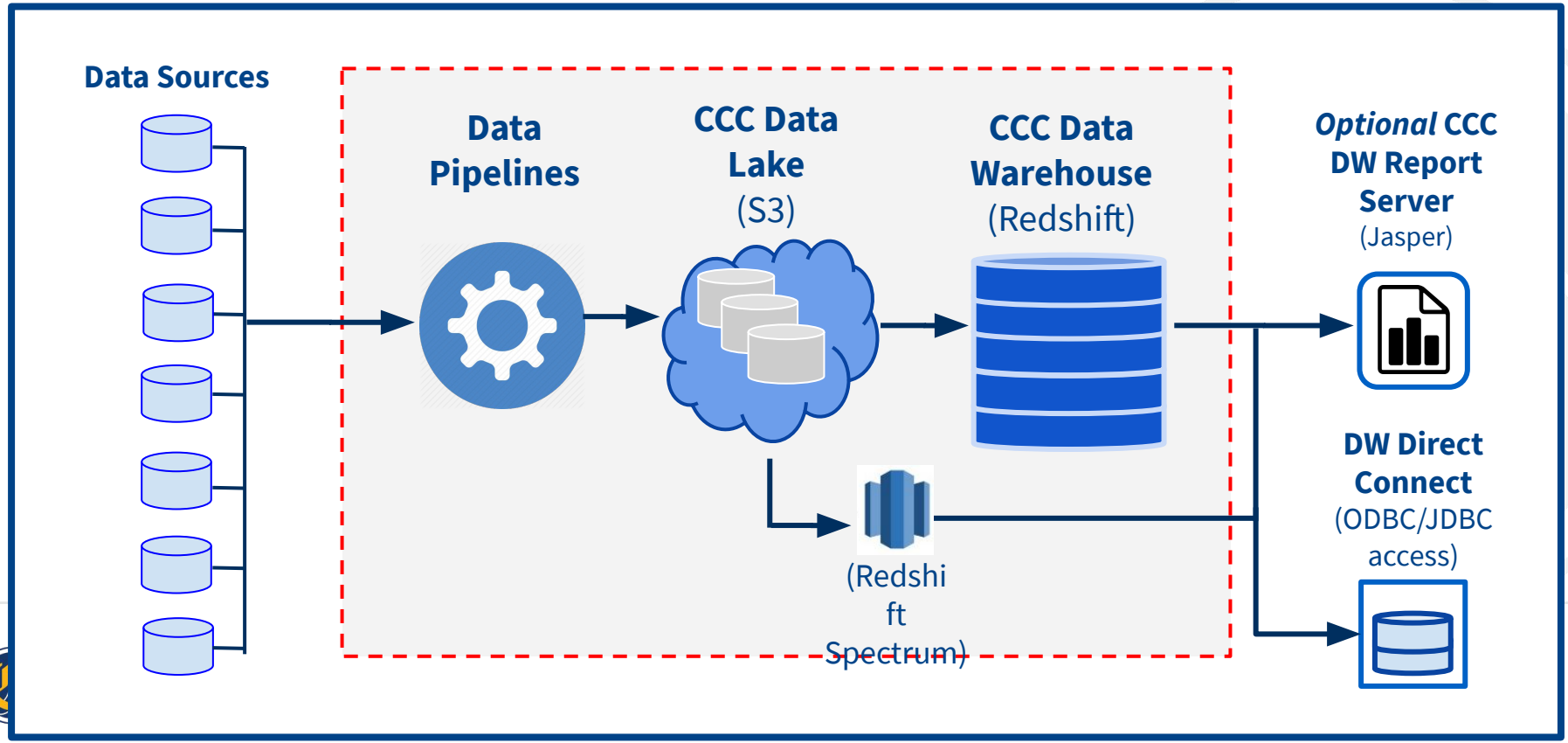
Available to colleges 20/21

Availability pending governance

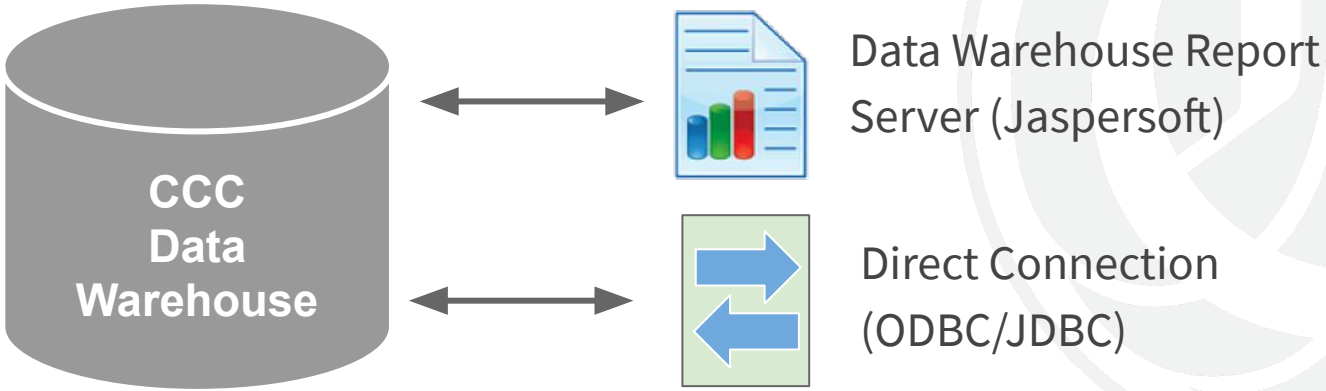
In progress/pending governance

CCC Data Platform



Accessing the CCC Data Warehouse

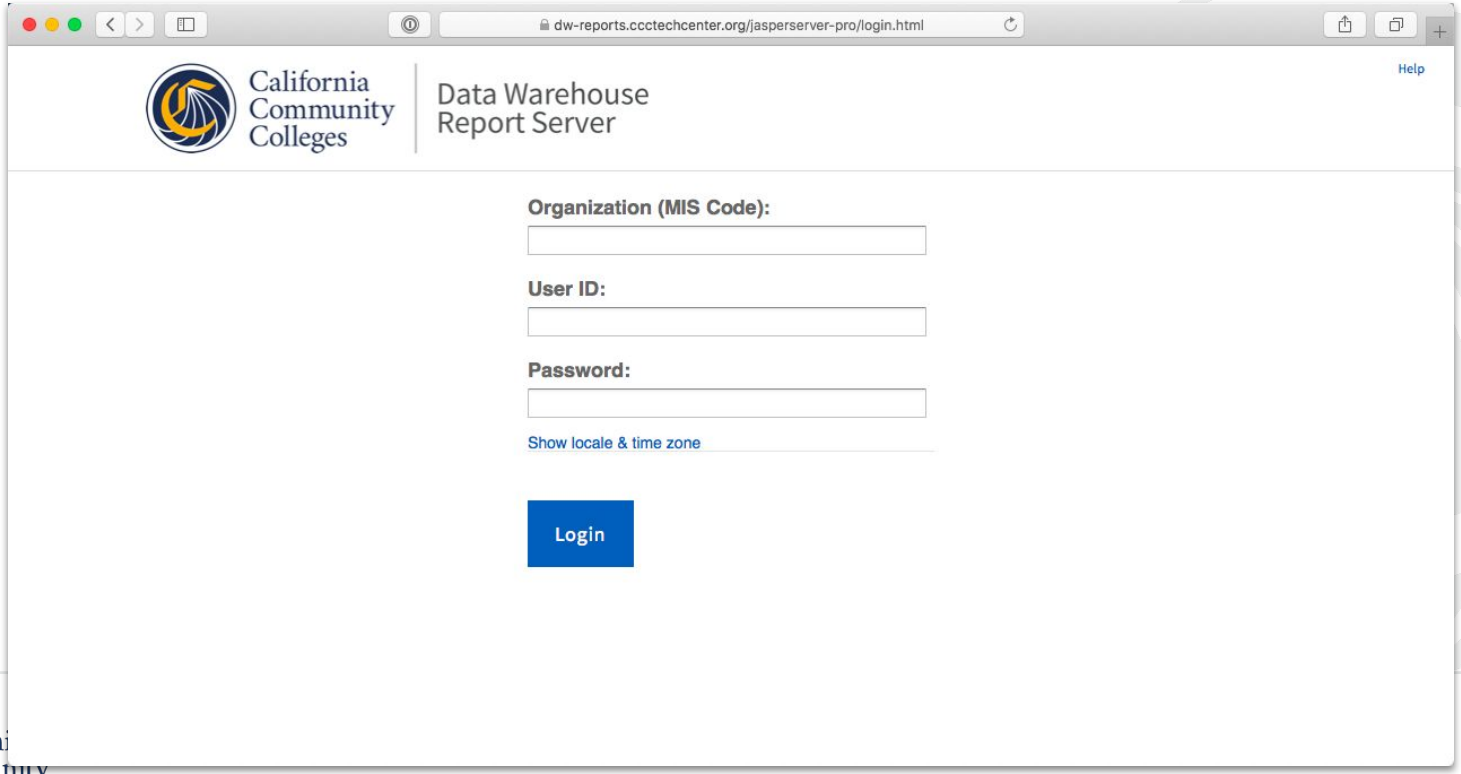
CCC Data available to approved college and district staff, through:



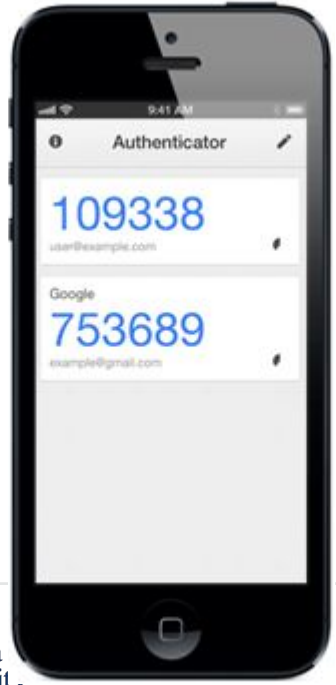
CCC Data: Direct Connect

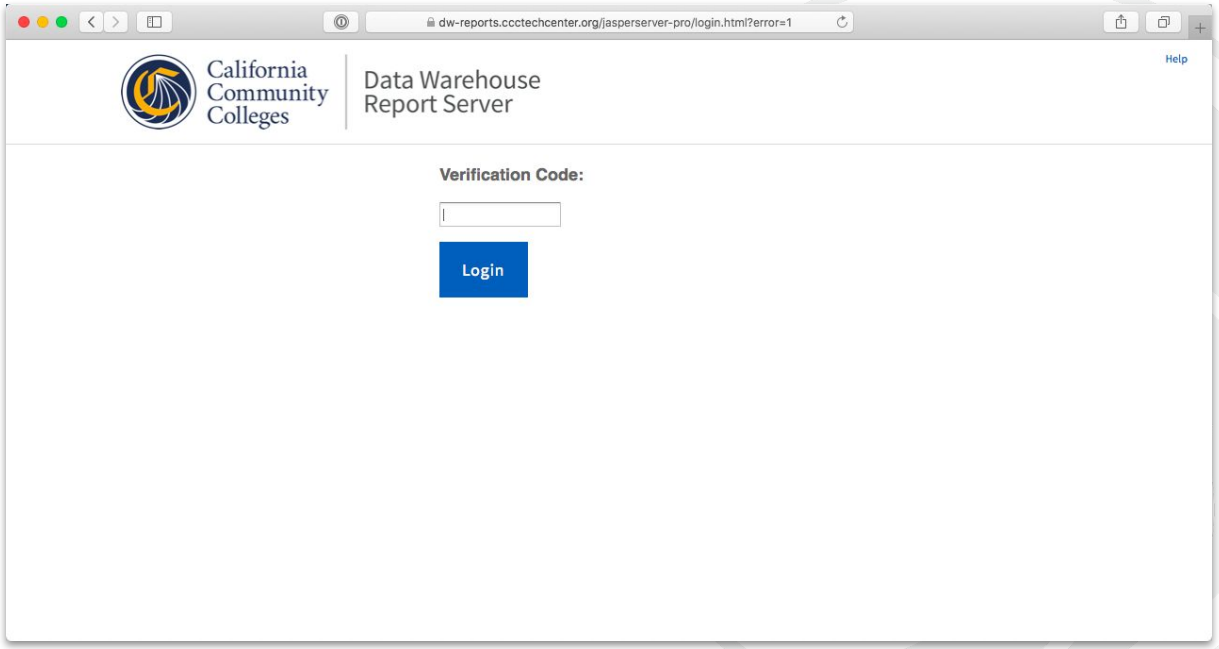
- Supports colleges and district offices connecting data in the CCC Data Warehouse, with:
  - Available BI/analytic applications, such as Tableau and Power BI,
  - SQL Workbench for direct queries
  - Local data warehouse, connected as external tables
- Connection requires:
  - Installation of custom site-to-site VPN
  - Data Warehouse log-in credentials

CCC Data: DW Report Server



Accessing the DW Report Server





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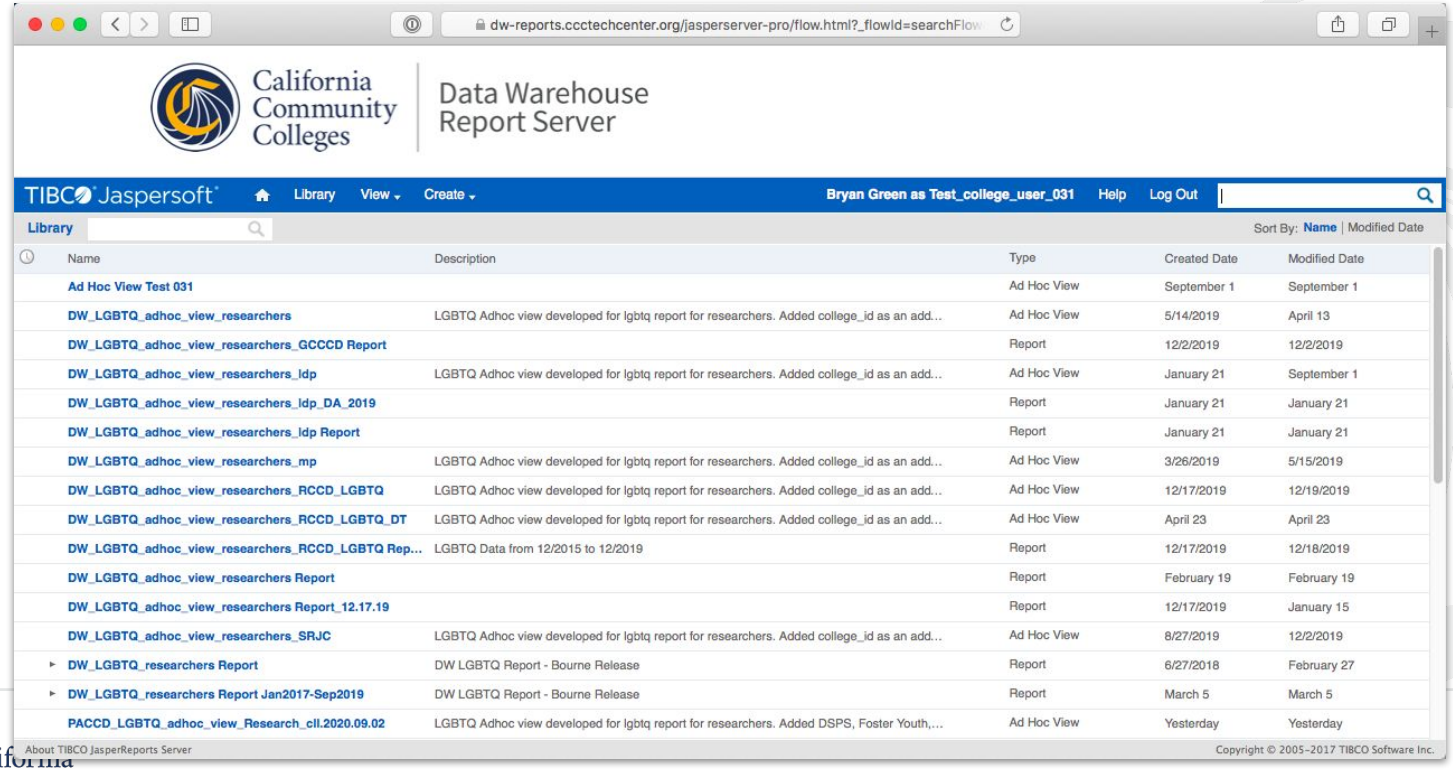
DW Report Server - Available Reports



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DW Report Server - Creating Reports

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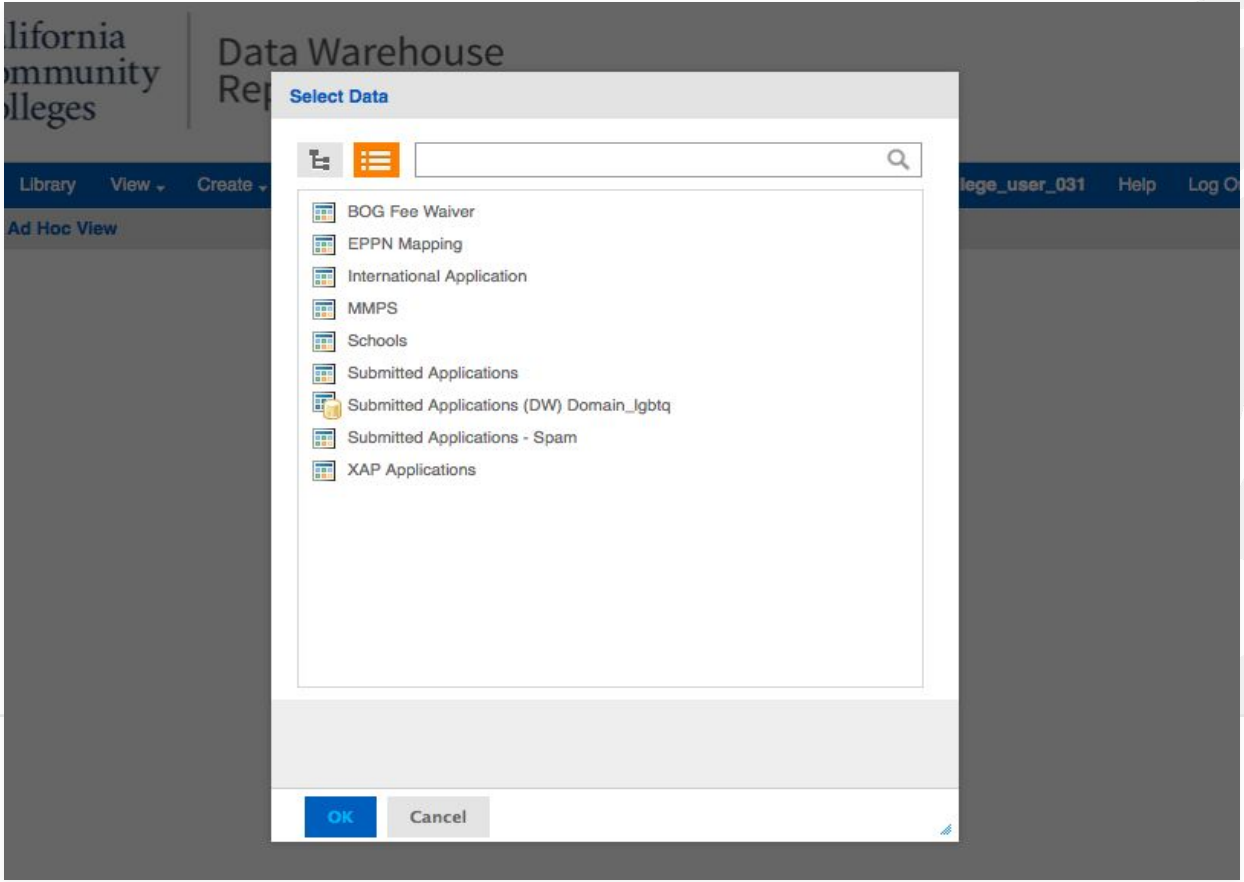

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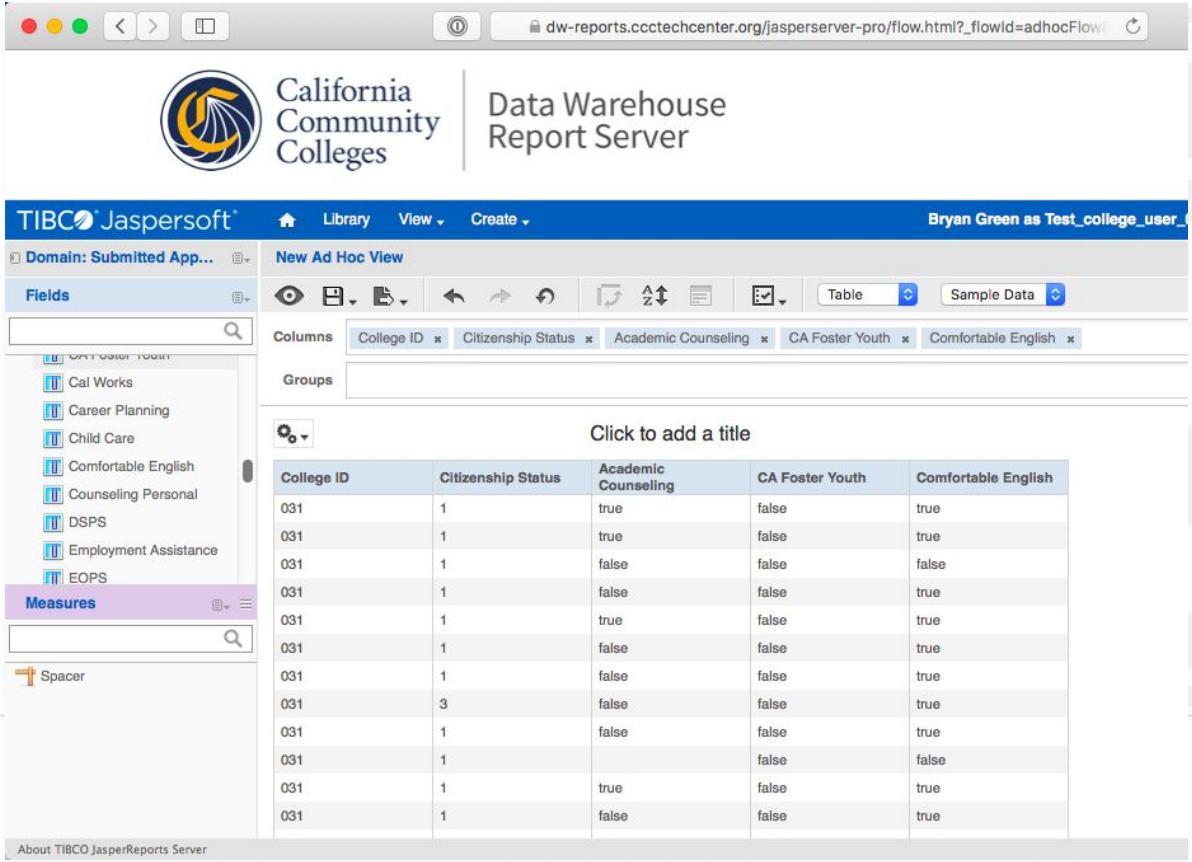
DW Report Server - Creating Reports



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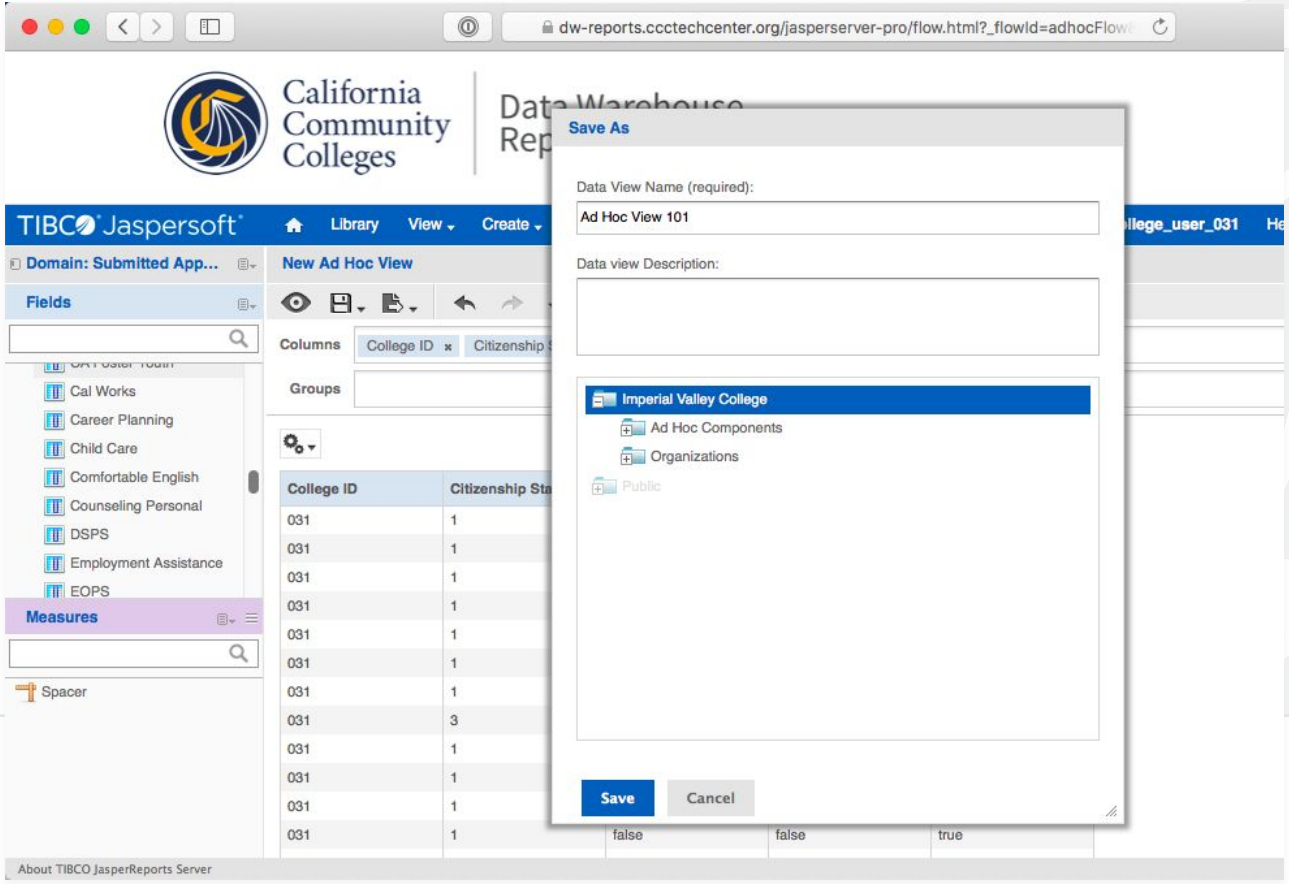
DW Report Server - Creating Reports



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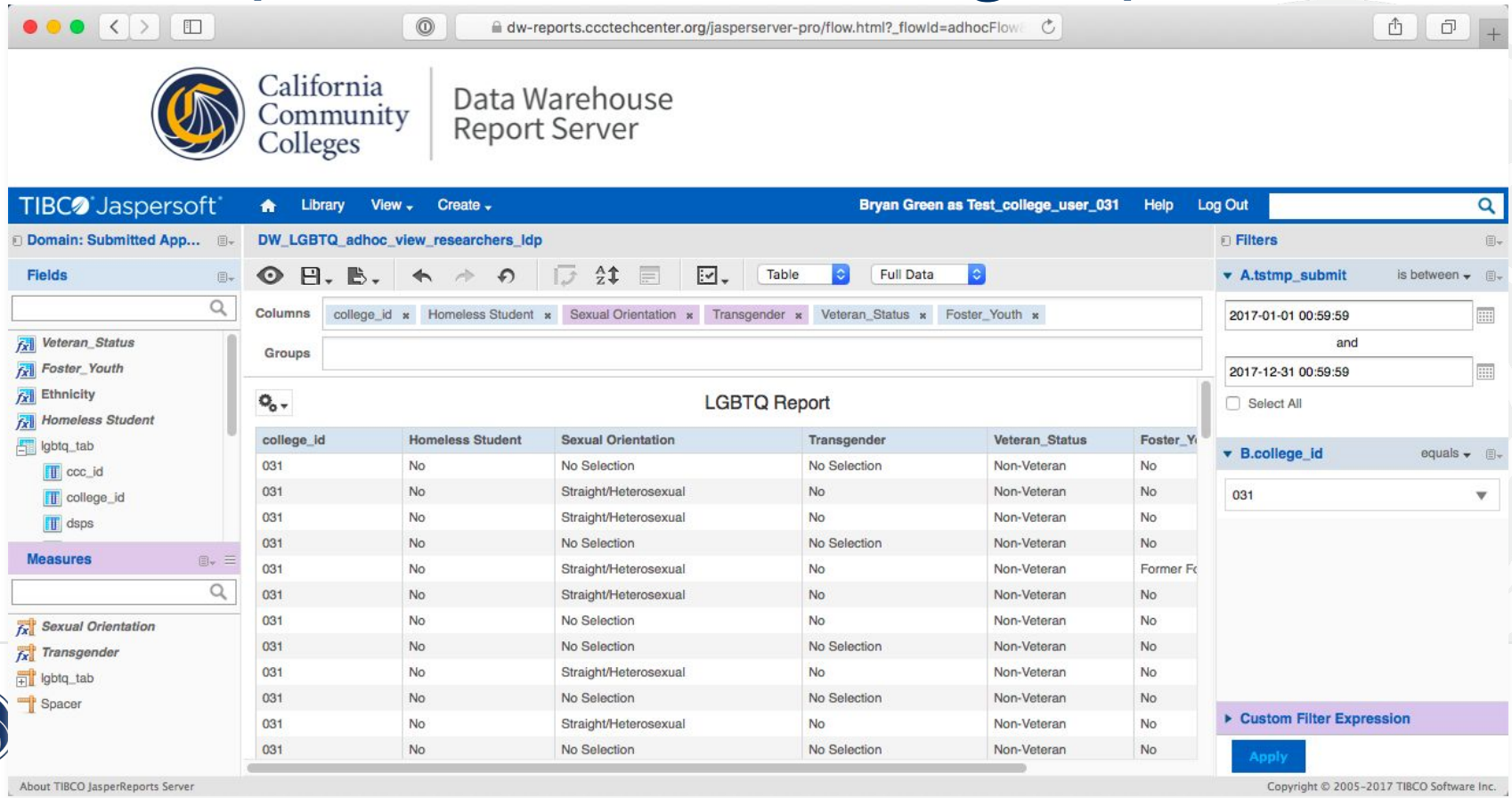
DW Report Server - Creating Reports



Requesting Access

Approved College/District Access

- Request made to: **CRMs@ccctechcenter.org**

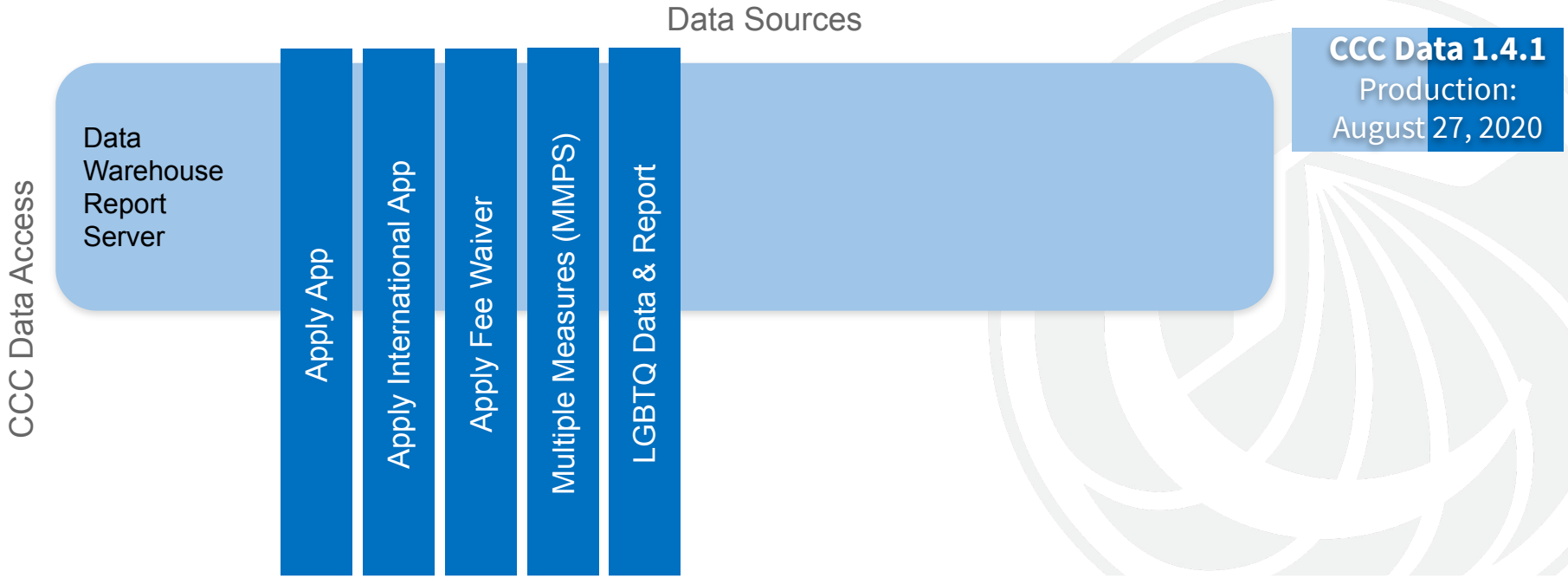
Chancellor's Office Access:

- Request made to: **mcohen@ccctechcenter.org**
- Approval by: Barney Gomez, Vice Chancellor for Digital Innovation & Infrastructure

Project Update: 2020/2021 Priorities

- New data sources to Data Lake & Data Warehouse, aligned with CCCCO priorities and guidance from the Data Warehouse Advisory Group
- Support colleges with appropriate access to the Data Warehouse & DW Report Center
- Update CCC Data access controls per revised CCCCO policies
- Focus on Maintenance & Operations
  - Updates to DL/DW data sources as necessary
  - Upgrade Jaspersoft DW Report Server
  - Technical debt and enhanced security

Project Update: CCC Data 1.4



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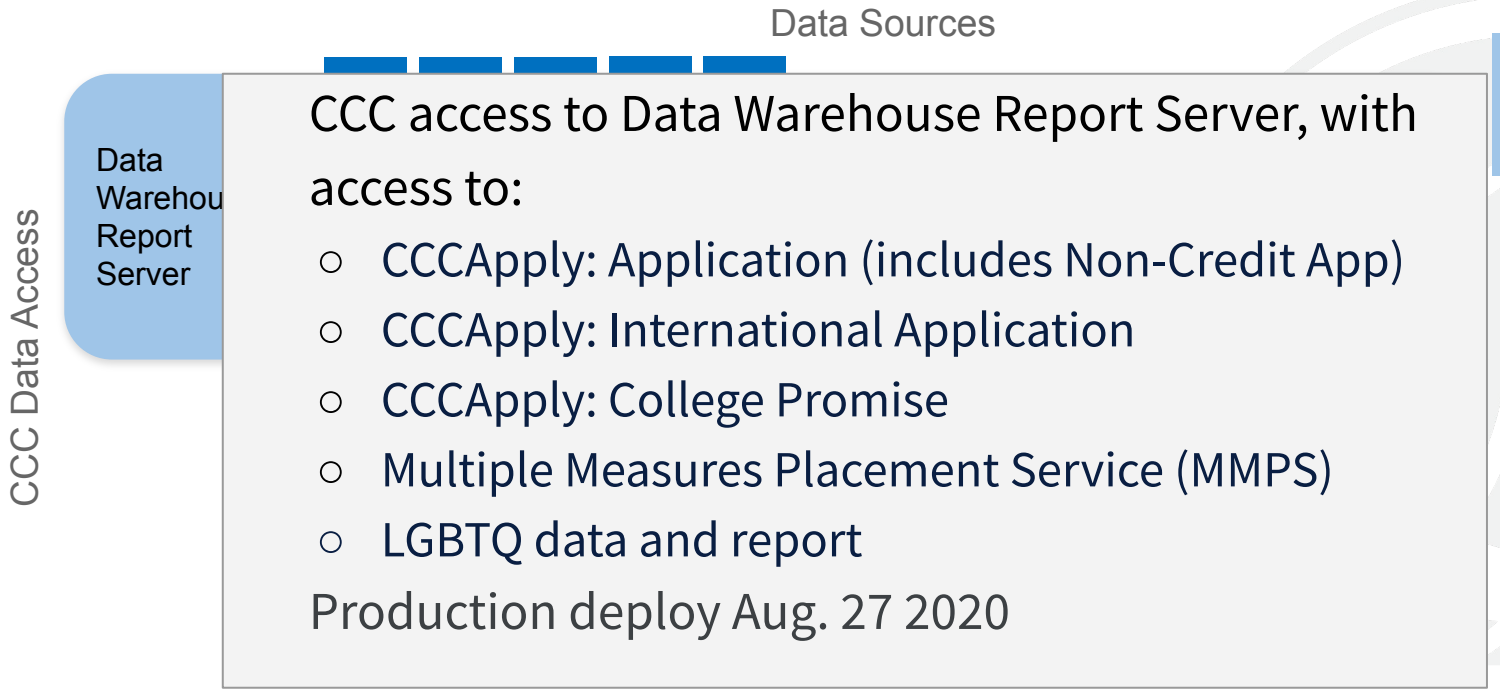
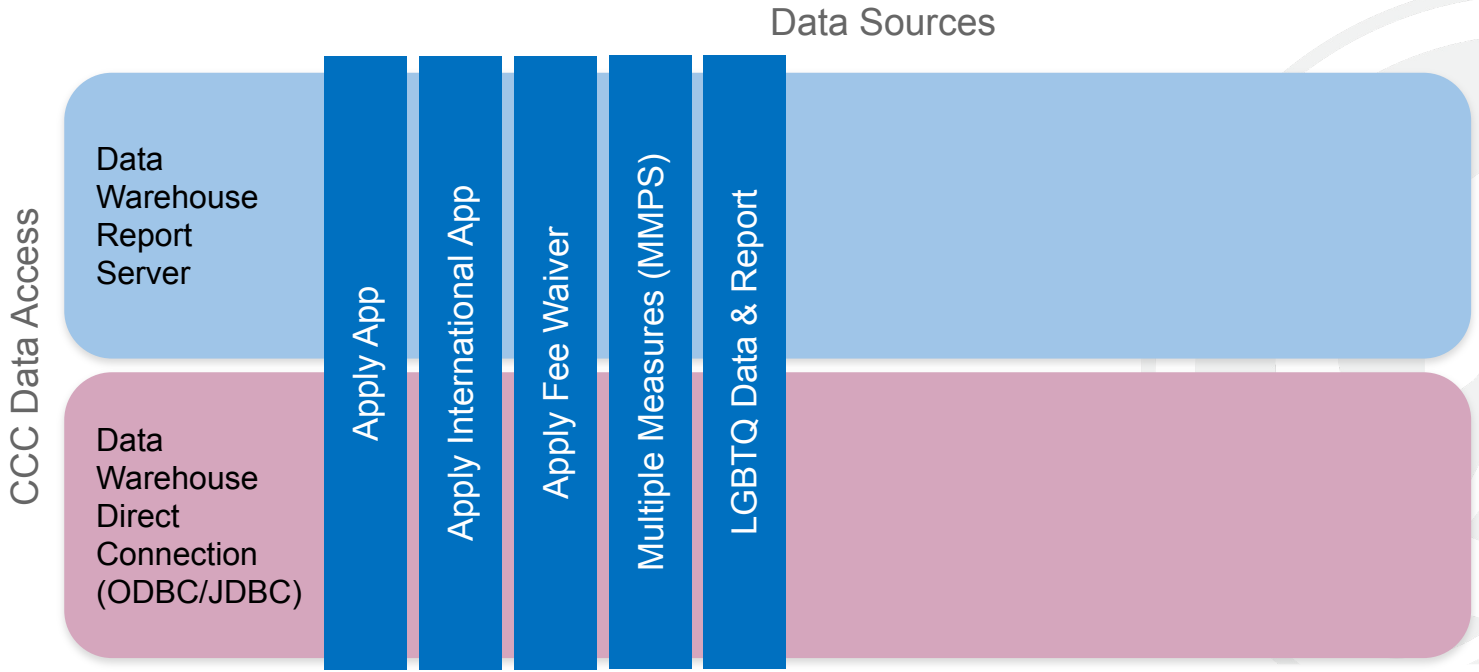


CCC Data 1.4.1
Production:
August 27, 2020

Project Update: CCC Data 2.0



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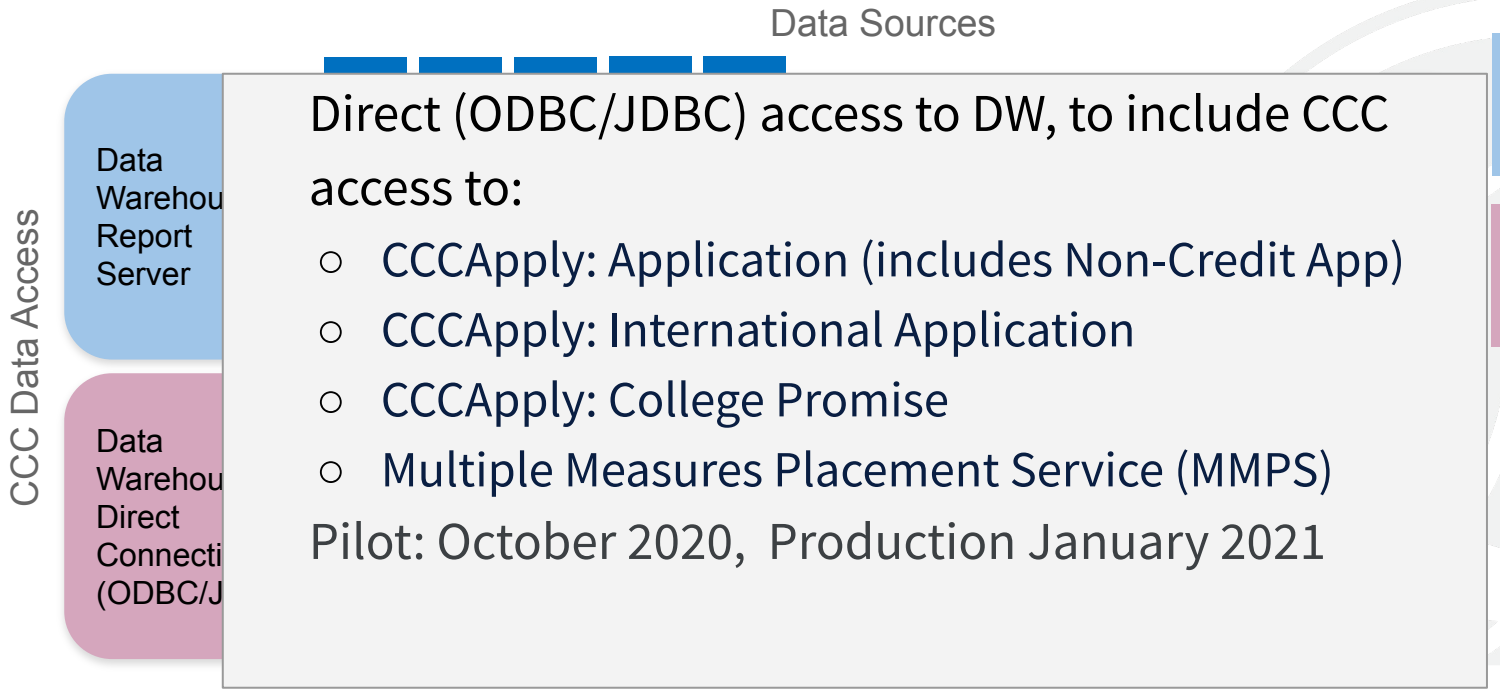
CCC Data 2.0
Pilot: Oct 2, 2020
Prod: Jan 15, 2021

Project Update: CCC Data 2.0



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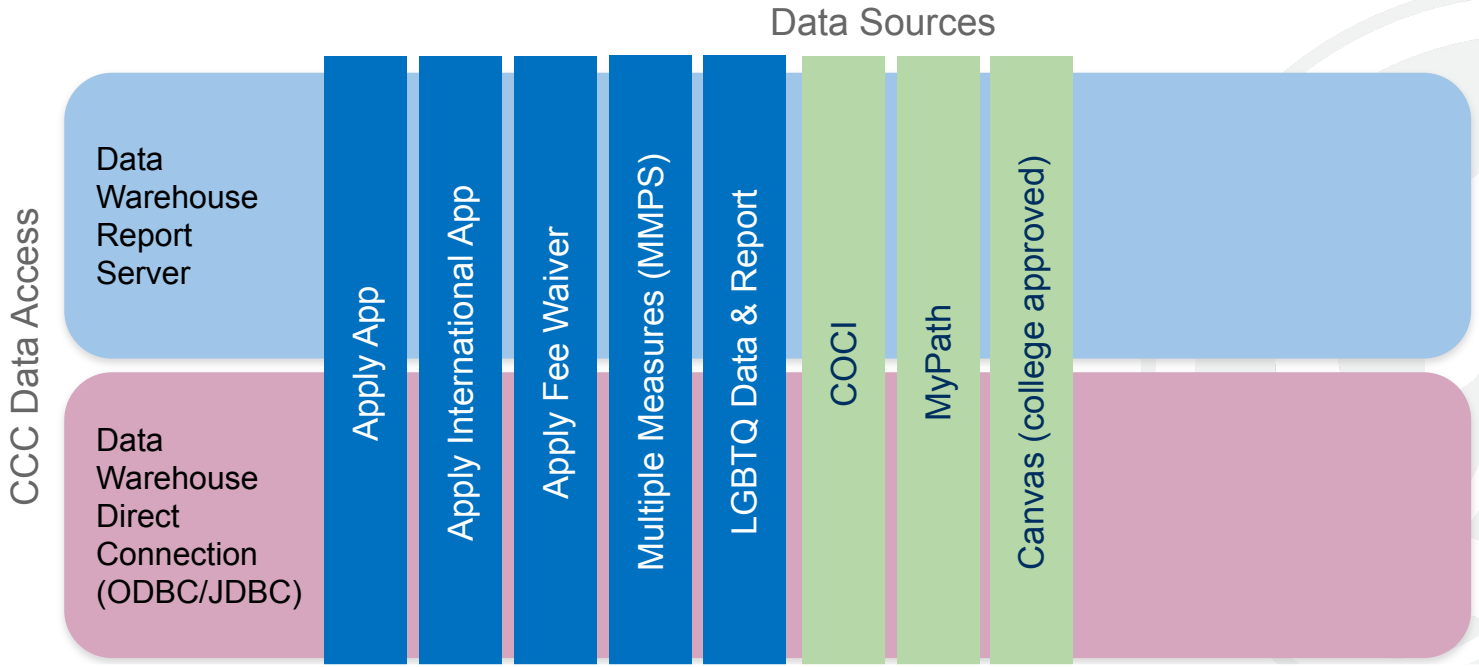

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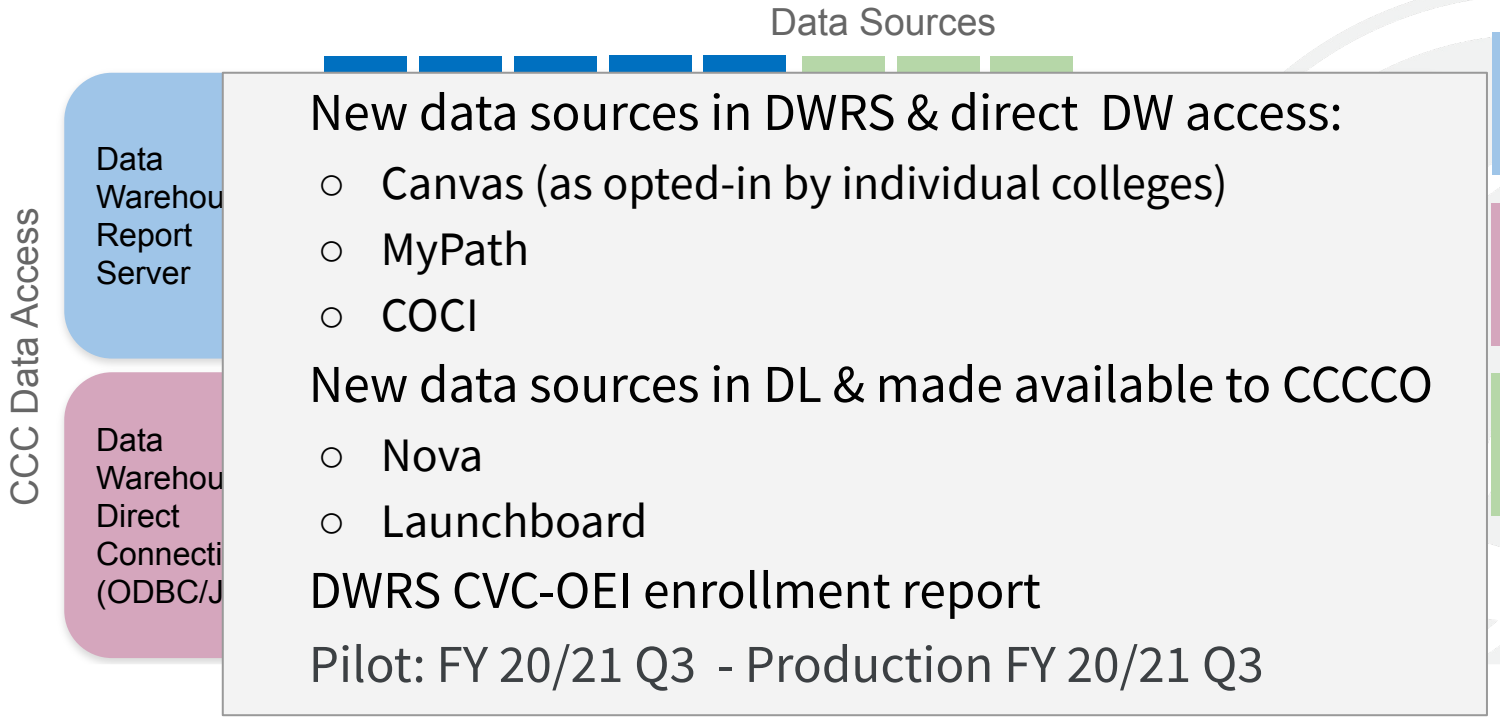

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CCC Data 2.1
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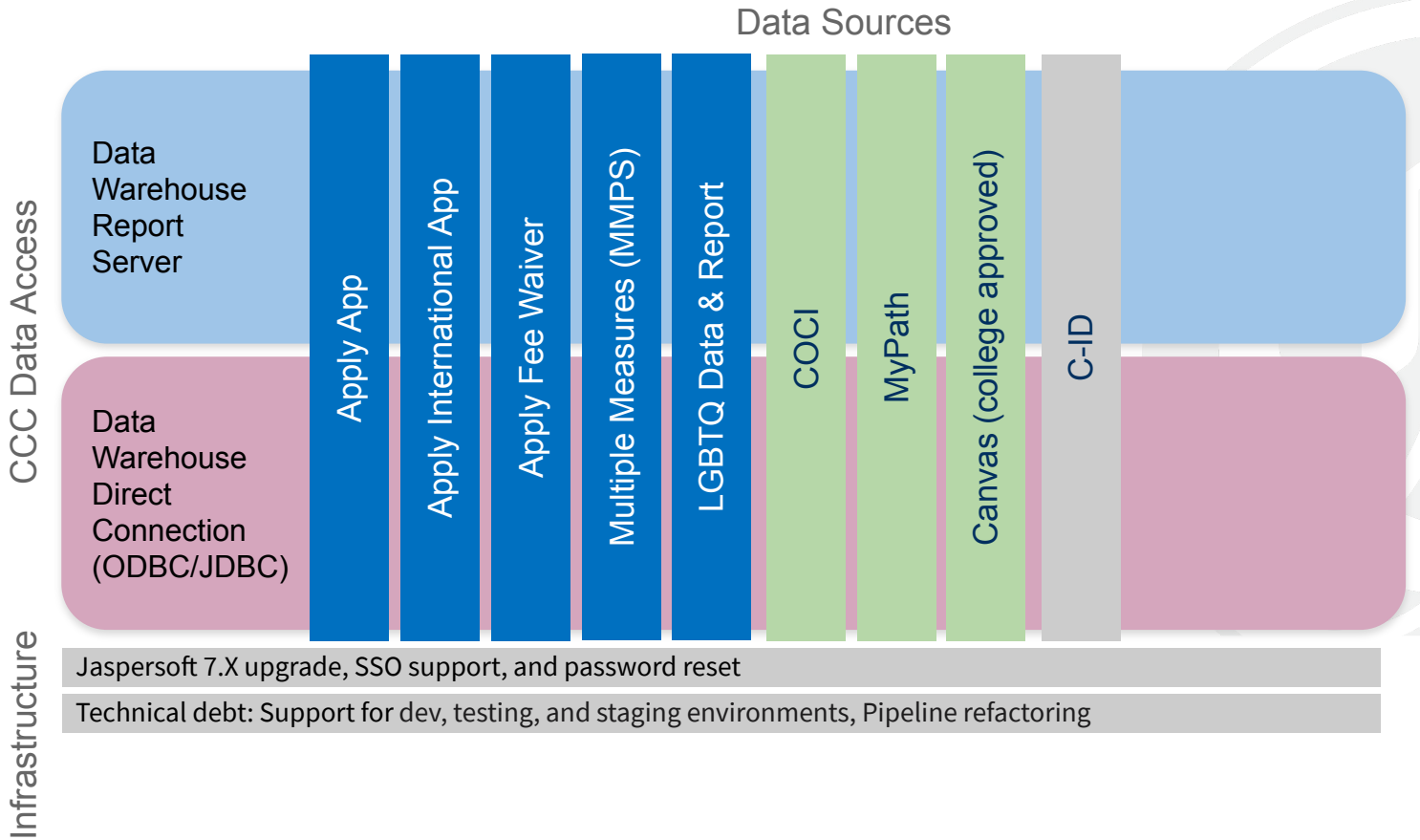
Prod: Q3 2020/21

Project Update: CCC Data 2.2



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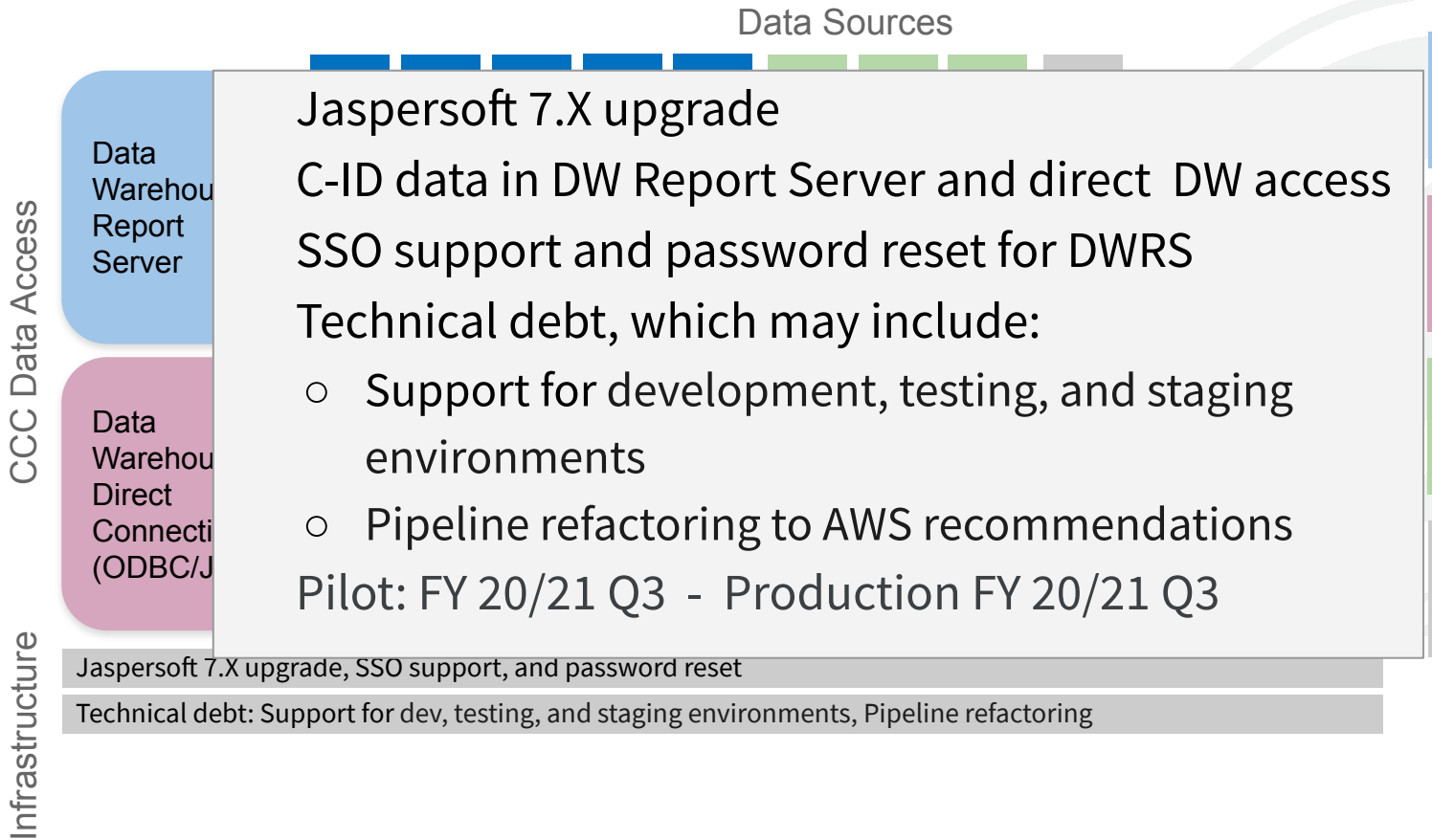
CCC Data 2.2
Pilot: Q3 2020/21
Prod: Q3 2020/21

Project Update: CCC Data 2.2



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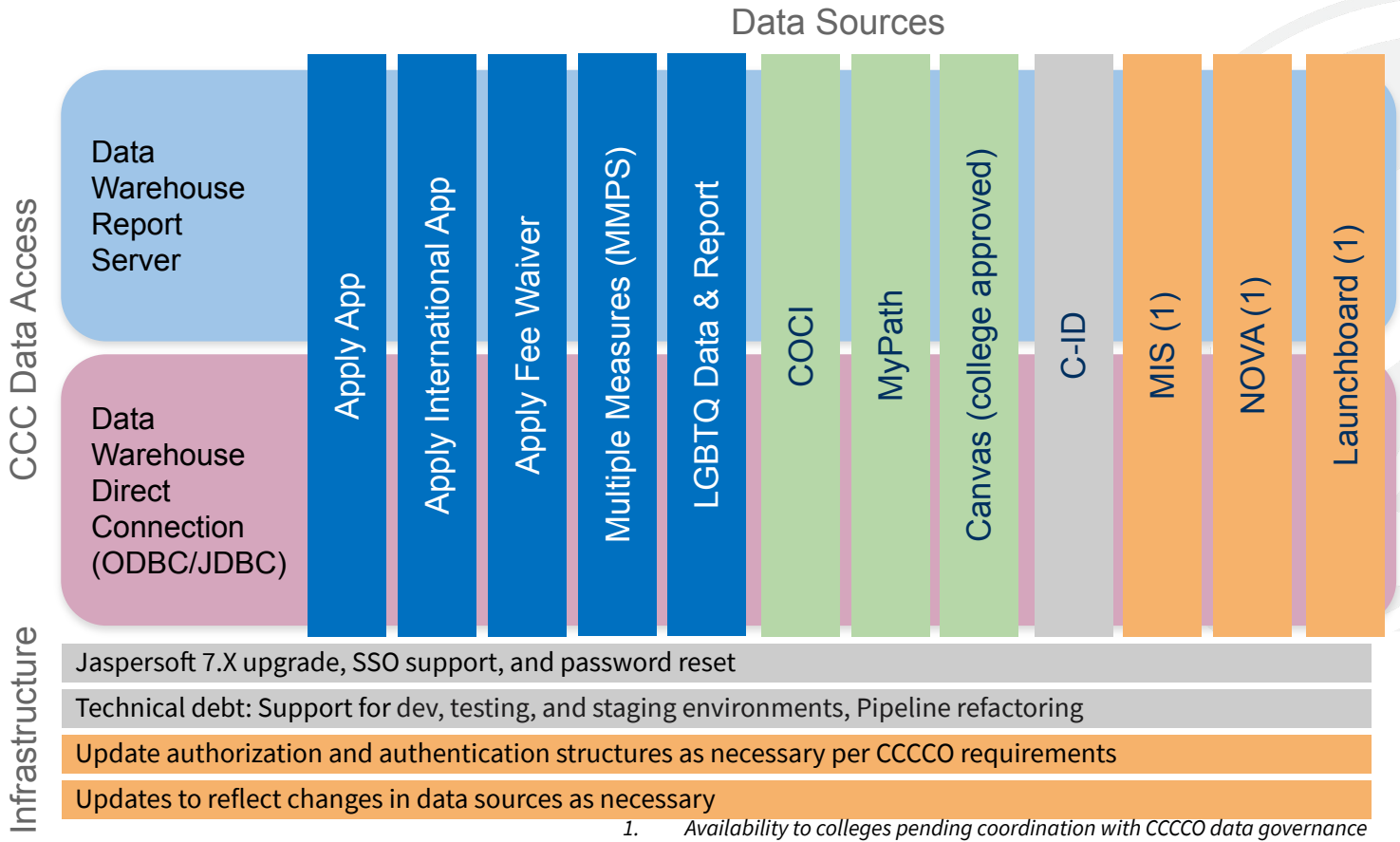
CCC Data 2.2
Pilot: Q3 2020/21
Prod: Q3 2020/21

Project Update: CCC Data 2.3



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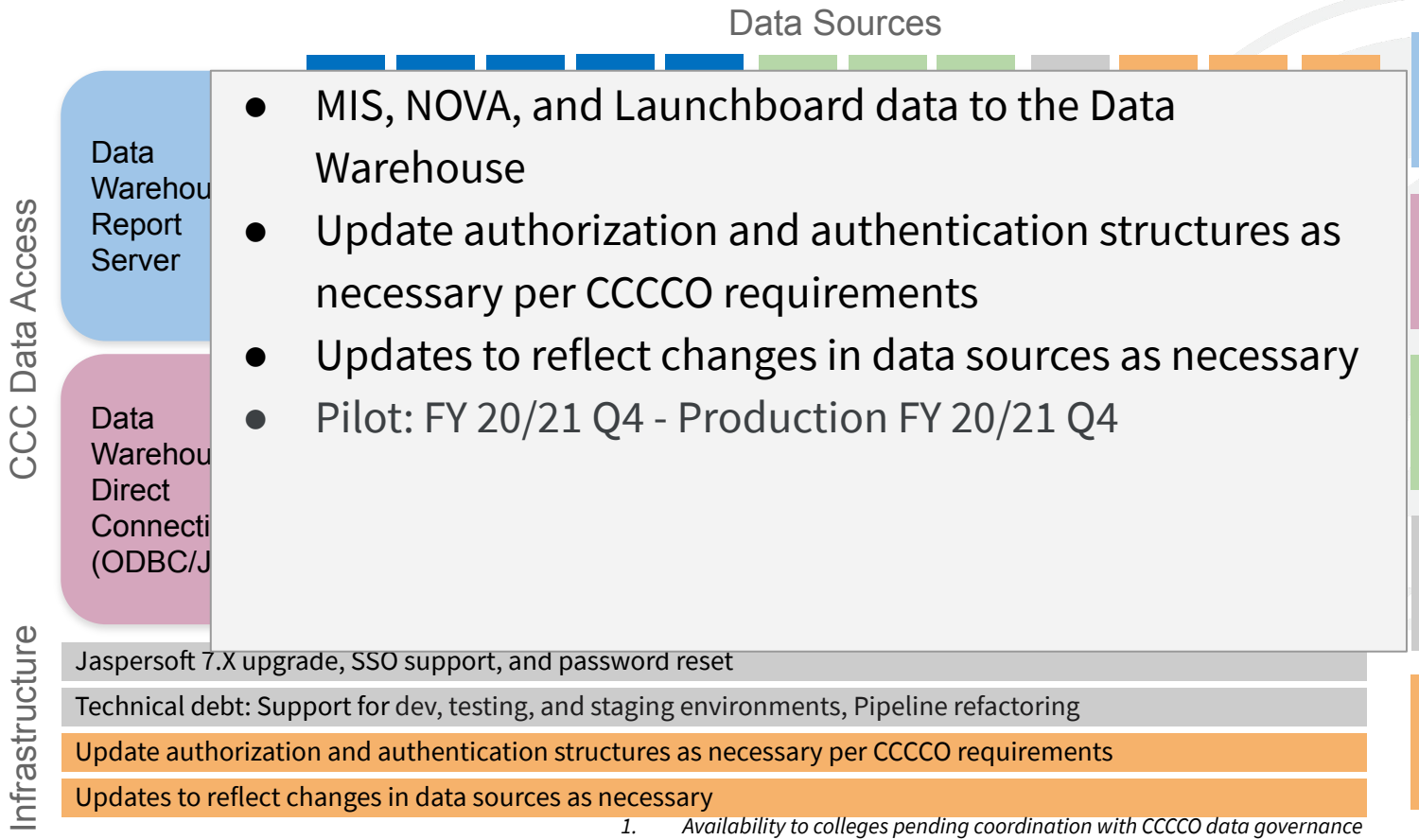
Prod: Q3 2020/21

CCC Data 2.2
Pilot: Q3 2020/21
Prod: Q3 2020/21

CCC Data 2.3
Pilot: Q4 2020/21
Prod: Q4 2020/21

1. *Availability to colleges pending coordination with CCCCO data governance*

Project Update: CCC Data 2.3



1. *Availability to colleges pending coordination with CCCCO data governance*

Stakeholder Engagement

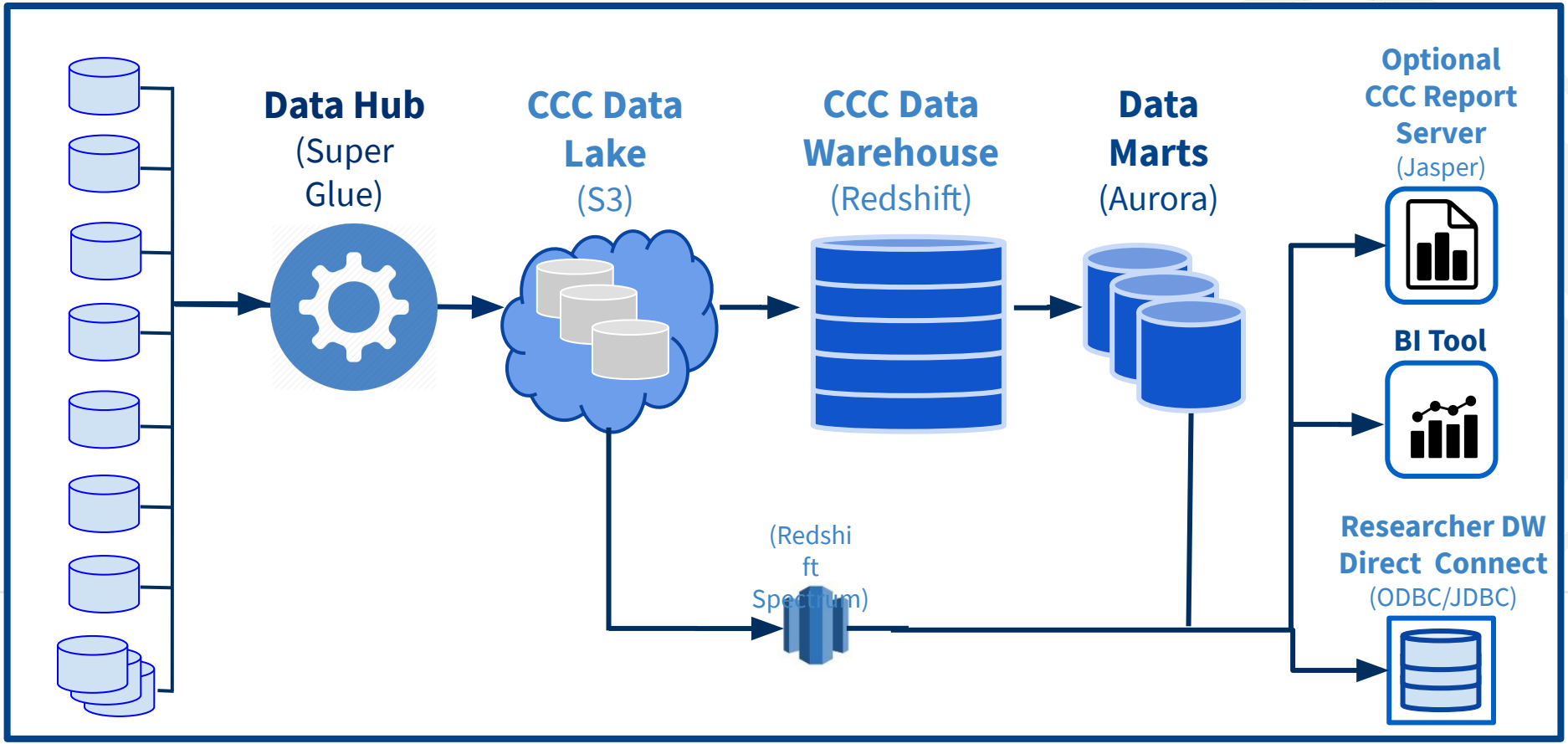
- Data Warehouse Advisory group made up of
  - CCC Institutional Research, Planning and Effectiveness Professionals (identified by the RP Group)
  - Chancellor's Office stakeholders
- Meets monthly to:
  - Inform and help to prioritize requirements for how college connect and leverage data
  - Recommend system and college data sources for inclusion in CCC Data

Prioritizing Potential Data Sources

Data	Business Need
MIS data	
Student Centered Funding Formula (SCFF)	Support compliance with SCFF, validation of formula results
EDD Unemployment Insurance Wage File	Critical data aligned with desired outcome or employment
UC (cohort match)	Support compliance with SCFF, validate SCFF and Student Success Metrics results
Perkins	Access data from all funded programs
Strong Workforce	Access data from all funded programs
CSU (cohort match)	Support compliance with SCFF, validate SCFF and Student Success Metrics results
Apportionment Attendance Report (CCFS-320)	Support compliance with SCFF, support ability to validate of SCFF formula results
CDE	Validated GPA, free & reduced lunch, and other data points from HS systems/reporting
Student Tracker (NSC)	Support compliance with SCFF, validate SCFF and Student Success Metrics formula results
Pell grant	Access data from all funded programs
Tops Pro Enterprise (CASAS)	WIOA Title I and Title II accountability requirements
Enterprise Resource Planning system	
Department of Apprenticeship Standards	Support CCC ability to validate of Student Success Metrics formula results
Insight Center for Community Econ Development	Support CCC ability to validate of Student Success Metrics formula results
CCGI	Validated GPA, free & reduced lunch, and other data points from HS systems/reporting
CTE Outcome Survey	Support reporting to strong workforce, and ability to validate Student Success Metrics formula results
Insight Center, Self-Sufficiency Tool	Support compliance with SCFF, support ability to validate of SCFF formula results
DSPS	Access data from all funded programs

POTENTIAL DATA SOURCES TO BE SUPPORTED

CCC Data Platform Extended



Discussion

For more information

CCC Data Warehouse Documentation: https://cccnext.jira.com/wiki/spaces/DWPub/overview

Information on CCC Data & Tech Center products: https://ccctechcenter.org/highlights

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