



ALL FOR ONE AND ONE FOR ALL - NOW THAT'S IT!

Production Control Shared Service Center (PCSSC)

Laurie Graham

AGENDA

- Who is PCSSC
- Advantages
- Overview of Software Tools
- Future Plans
- Getting On Board

SERVICE DESCRIPTION

- Provides Core Competency for Workload Automation, Batch Job Scheduling, and Managed File Transfers for UCB, UCSF, UCOP and UCPath
- Business applications on mainframe and distributed platforms
 - Benefits, Financial Systems, HR, Payroll, Student Systems
- UC Multi-campus team formed as part of Operational Excellence
- Fully operational Oct, 2011 with team members from UCB, UCSF, UCOP

PCSSC SERVICES

- Application and System Automation
 - Leveraging industry leading BMC software's Control-M suite for Batch Job Scheduling
 - New application job scheduling automation
 - Job scheduler conversions to Control-M
 - Workload automation best practices
- Secure Managed File Transfer
 - Utilizing MFT software (GoAnywhere) which is scheduled thru Control-M
- Monitoring of all batch and file transfers, 24x7x365
- First level problem management for all batch
- Integration with Control-M, ServiceNow and xMatters for notification and escalation of batch and MFT issues

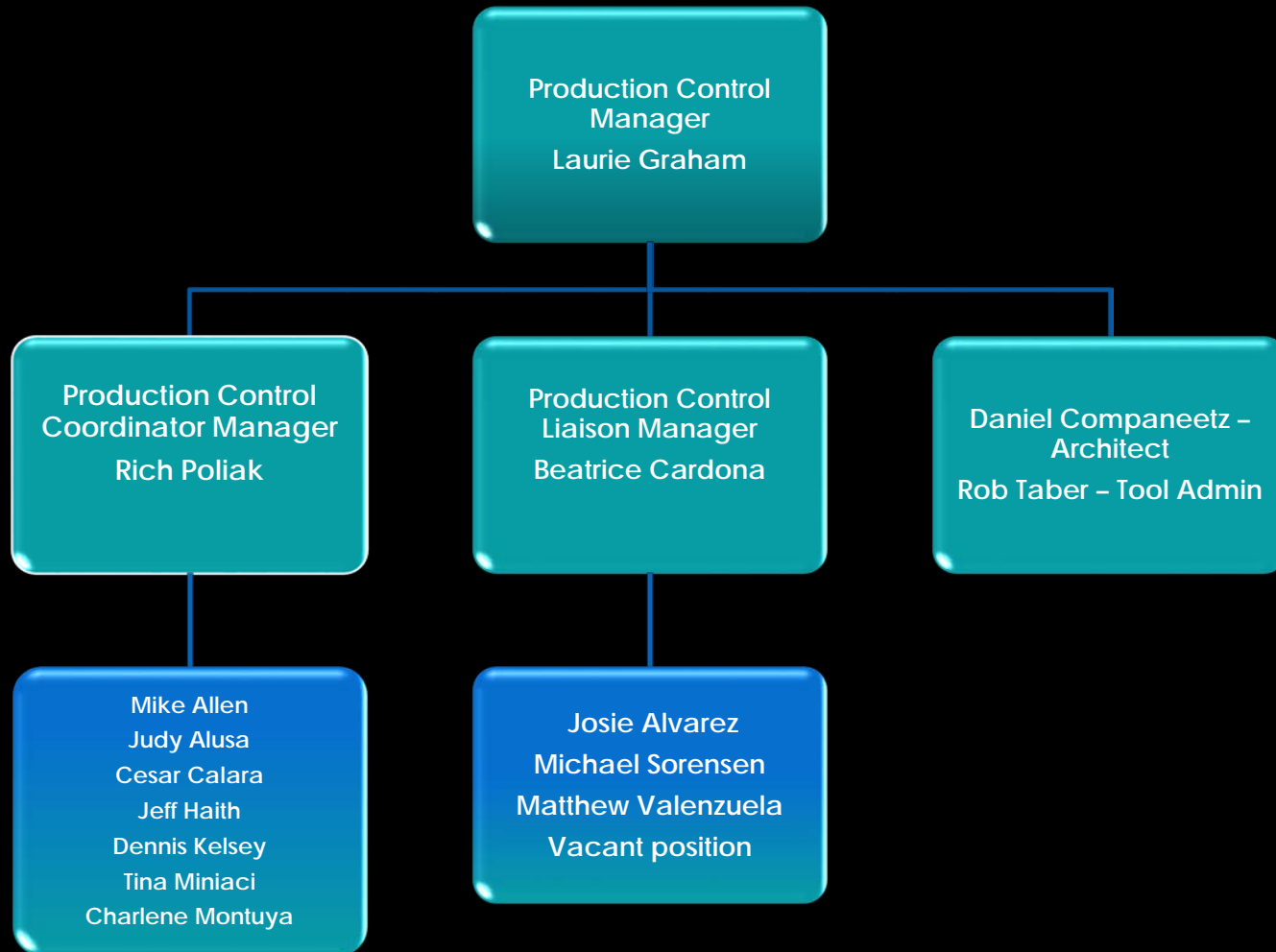
PCSSC TEAM

- Coordinators
 - Monitoring and management of campus production workloads, 24x7x365
 - Incident Management focal point for automated workflows
 - Level 1 support - 24x7x365
- Liaisons – Client Engagement
 - Collaborate with business support organizations to define and configure application automation efforts
 - Provide business Analysis
 - Promote business process improvements, especially for the conversion of manual to automated workloads
 - Level 2 support
 - Monday thru Friday, 6:00am to 6:00pm. All other hours On-Call

PCSSC TEAM

- Tools Administrator / Architect
 - Technical configuration for new connections and automation requests
 - New technology adoption proof of concept, including scheduling or MFT conversions (like Automic to Control-M or SOA to MFT)
 - Level 3 support and vendor technical management
- PCSSC Management along with Team
 - Provide the strategic vision as a multi-campus Engagement Partner
 - Service Design and Management

PCSSC TEAM



ADVANTAGES

- Cost
 - Eliminates duplicate staff functions, utilizing existing PCSSC staff
 - Leverages software licenses across campuses
- Scheduling and Managed File Transfers
 - Efficiently manage 24x7x365 operations
- Standardization
 - Increases business agility by supporting dynamic changes in business requirements
 - Helps manage batch and file processing dependencies across all locations for UCPATH
 - Simplifies problem solving through shared knowledge
 - Utilizes common, standard scheduling and file transfer software

ADVANTAGES

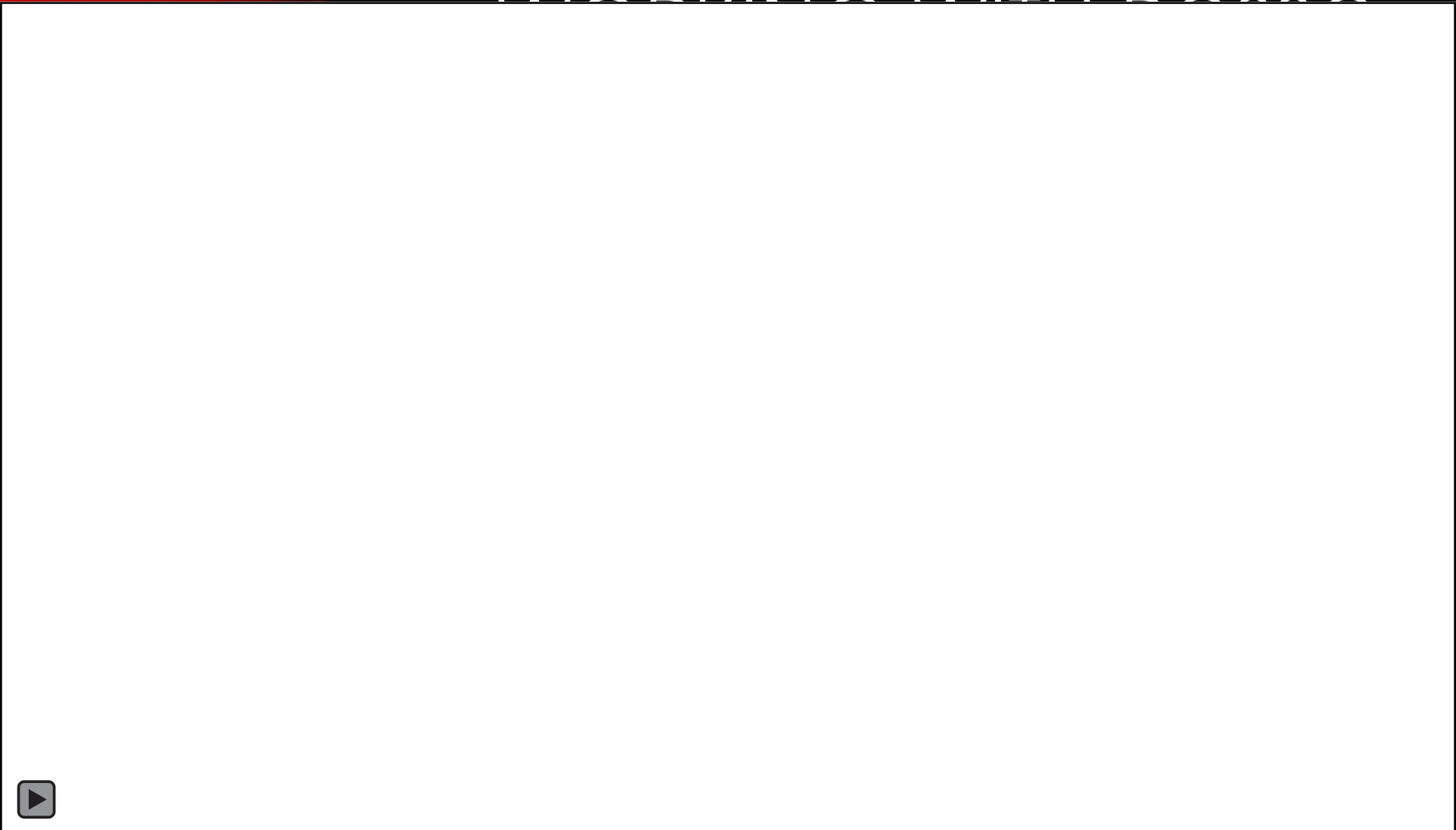
- Customer focused mindset
- Service managed via Service Level Agreements
- Skilled resources leveraged across multiple operating units
- Enables UC to focus on their core mission of research and education

PCSSC SUPPORT MODEL

- Provides 24x7x365 monitoring of the following:
 - All production batch workload including MFT jobs
 - Control-M and GoAnywhere software and infrastructure
- Provides notification and escalation of production incidents, production batch failures, failures of production file transfers, as well as Level 1 trouble shooting, 24x7x365
- Provides the ability to monitor the end-to-end solution for batch and MFT
- All batch and MFT errors are automatically captured in UCB ServiceNow via interface with xMatters
 - All Relevant UCOP and UCPath tickets are 'synced' with the UCOP ServiceNow
- Call center 24x7x365



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OVERVIEW OF CONTROL-M

- Control-M for Mainframe and Distributed Environments
 - Manages production scheduling across the enterprise with a unified user interface – single point of control
 - Coordinates workloads with dependencies across multiple operating systems and platforms
 - Established criteria for enterprise workloads
 - Enables adaption to real-time resource availability
 - Historical reports for internal and external auditors, including cross-reference to failures with ServiceNow Incident tickets

OVERVIEW OF CONTROL-M

CONT'D

- Control-M Batch Impact Manager (BIM)
 - Visibility and agility to quickly remediate issues before they affect service availability or SLAs
 - Enables early response to issues that can affect critical batch
 - Detects potential delays and errors
 - Prioritizes resolution of delayed or failed batch processes
 - Supports “what if” scenarios
 - Alerts for exceptions
 - Management of dynamic heterogeneous production environments
 - Centralized GUI

OVERVIEW OF CONTROL-M

CONT'D

- Control-M Forecast
 - Predicts batch flow for a specific date
 - Supports “what if” scenarios
 - Validates accuracy of complex job scheduling rules
 - Visual calendar
 - Trend analysis for balancing workloads

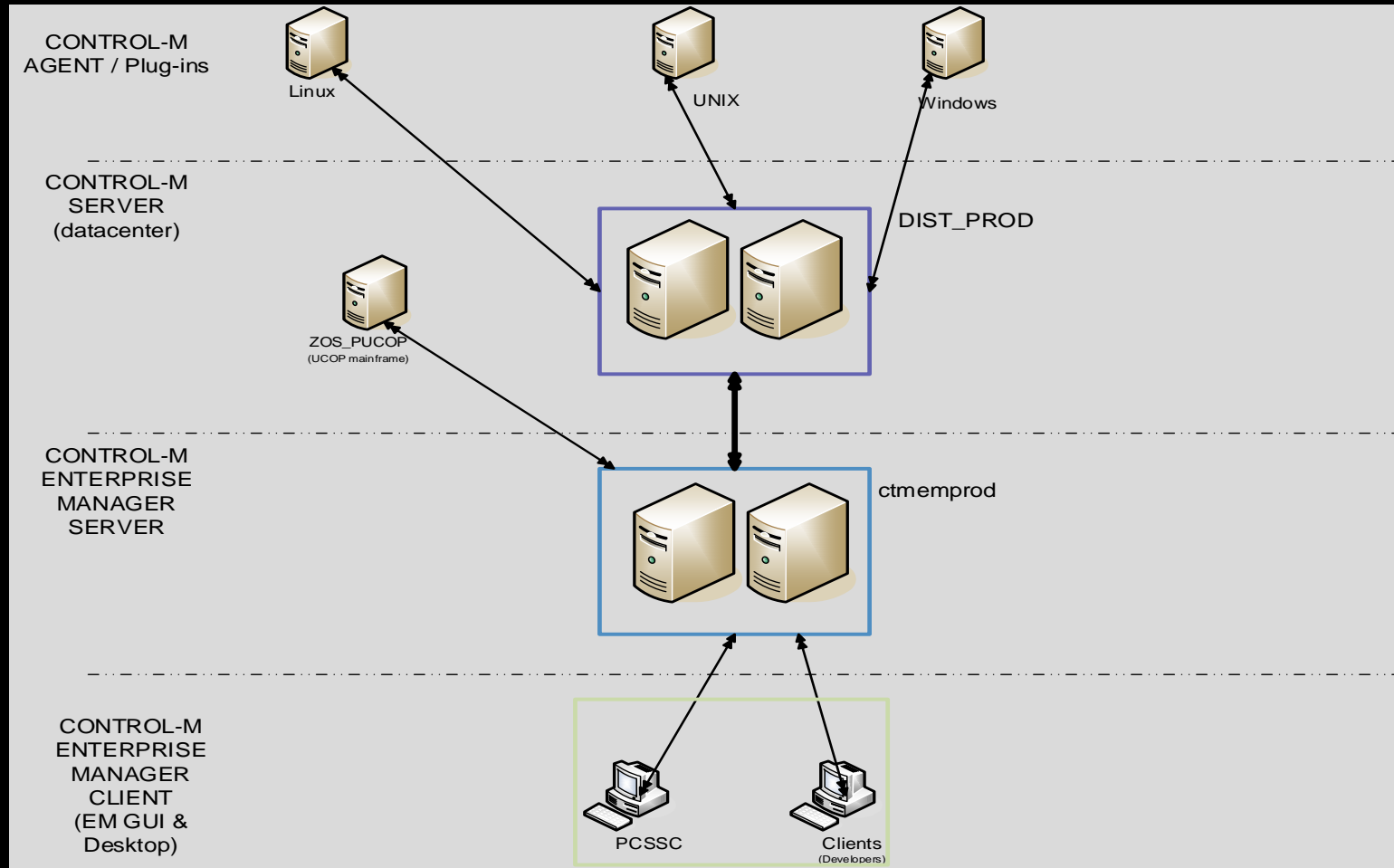
BMC Control-M by applications

BMC Control-M by platforms

<p>ERP</p> <ul style="list-style-type: none"> SAP Oracle eBusiness Suite PeopleSoft Oracle Retail 	<p>Business Intelligence</p> <ul style="list-style-type: none"> SAP Business Objects IBM Cognos Oracle Business Intelligence (OBIEE) 	<p>Data Integration / ETL</p> <ul style="list-style-type: none"> Informatica IBM InfoSphere DataStage MS-SQL Integration Services (SSIS) SAP Business Warehouse (BW) 	<p>OS Platform</p> <ul style="list-style-type: none"> Windows Solaris HP-UX AIX Red Hat SUSE CentOS Ubuntu <ul style="list-style-type: none"> z/OS iSeries / OS400 VMS Unisys Tandem
<p>Database</p> <ul style="list-style-type: none"> Oracle IBM DB2 / UDB MS SQL-Server Sybase PostgreSQL <ul style="list-style-type: none"> MySQL* SAP HANA* MongoDB* Cassandra* <p><i>* Any JDBC Compatible</i></p>	<p>File Transfer</p> <ul style="list-style-type: none"> File Transfer Protocol (FTP) Secured FTP (SFTP) FTP Over SSL 	<p>Backup and Recovery</p> <ul style="list-style-type: none"> IBM Tivoli Storage Manager Symantec NetBackup 	<p>Agentless scheduling</p> <ul style="list-style-type: none"> SSH WMI
<p>Service Oriented Architecture</p> <ul style="list-style-type: none"> Web Services (SOAP, RESTful) Java/J2EE Message Queues 	<p>BMC Software</p> <ul style="list-style-type: none"> BMC TrueSight Operations Management BMC Atrium CMDB BMC Atrium Orchestrator BMC BladeLogic BMC Remedy 	<p>Big Data / Hadoop</p> <p>Distributions:</p> <ul style="list-style-type: none"> Hortonworks, Cloudera, MapR IBM BigInsights, EMC Greenplum/Pivotal <p>Projects:</p> <ul style="list-style-type: none"> Spark, Oozie, MapReduce, Pig, Hive, Tajo, HDFS, Sqoop, Streaming, DistCP 	<p>Virtualization & Cloud Computing</p> <ul style="list-style-type: none"> VMware Amazon Web Services (AWS) BMC Cloud Lifecycle Management

Automate Any Application with **BMC Control-M Application Integrator** bmc.com/hub

ARCHITECTURE OF CTM



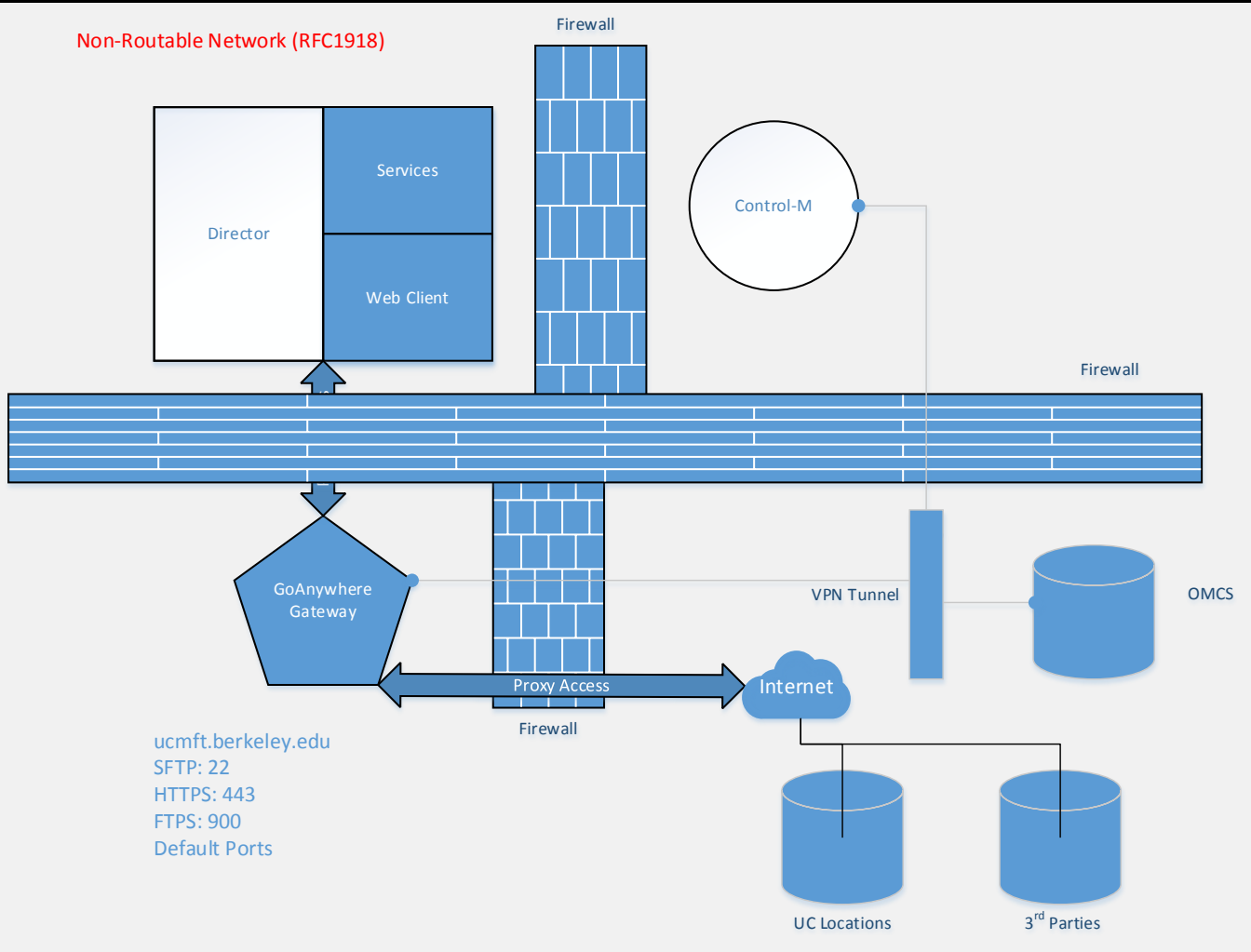
OVERVIEW OF GOANYWHERE

- Automates and secures mission-critical file transfers for the enterprise
- Provides centralized control and visibility for both scheduled and ad-hoc transfers
- Supports most standard protocols and encryption standards
- Provides strong encryption and detailed audit trails to help organizations meet strict compliance regulations like HIPAA, PCI DSS, SOX, GBLA and FISMA

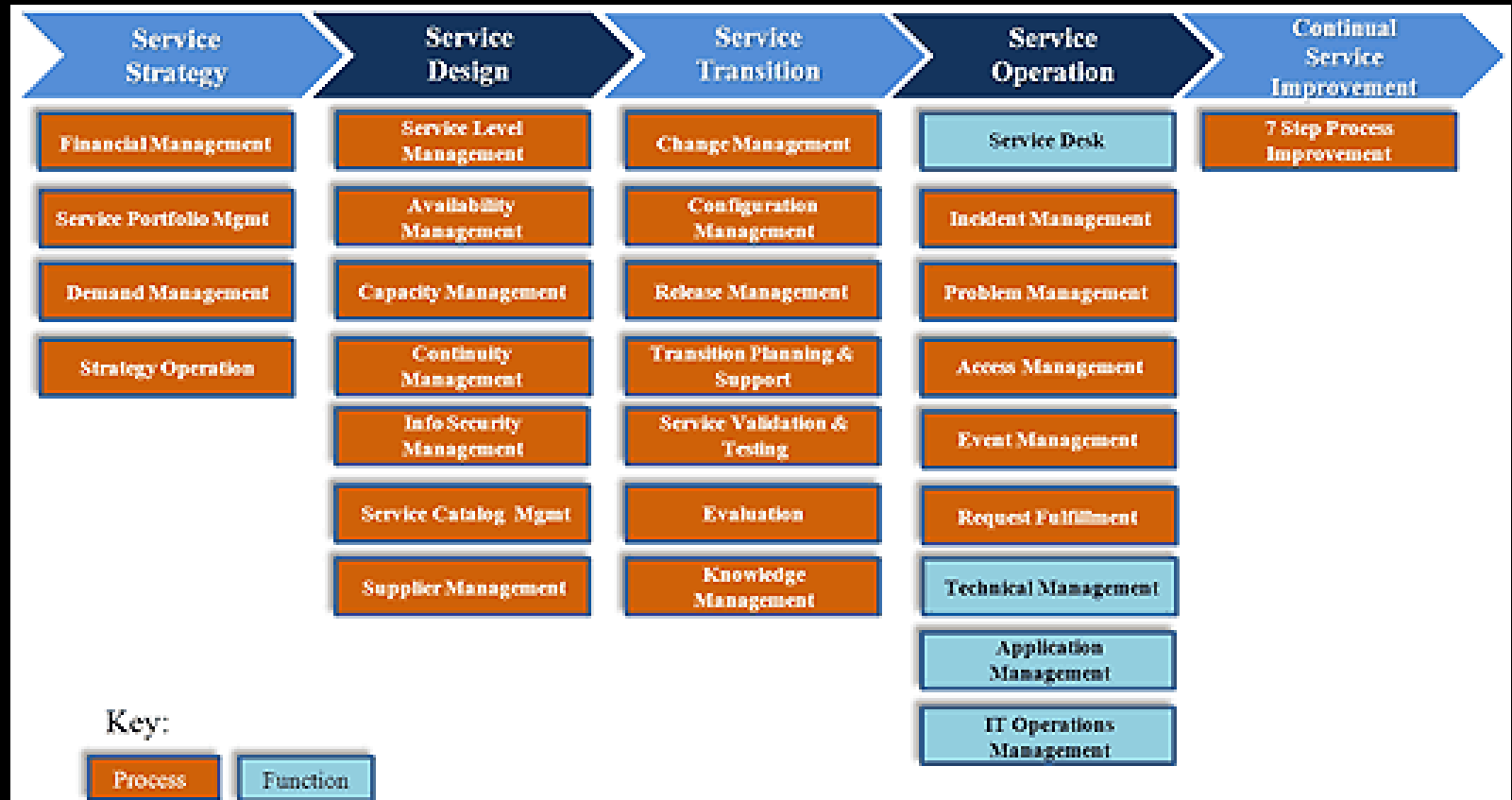
OVERVIEW OF GOANYWHERE



ARCHITECTURE OF CTM AND GOA



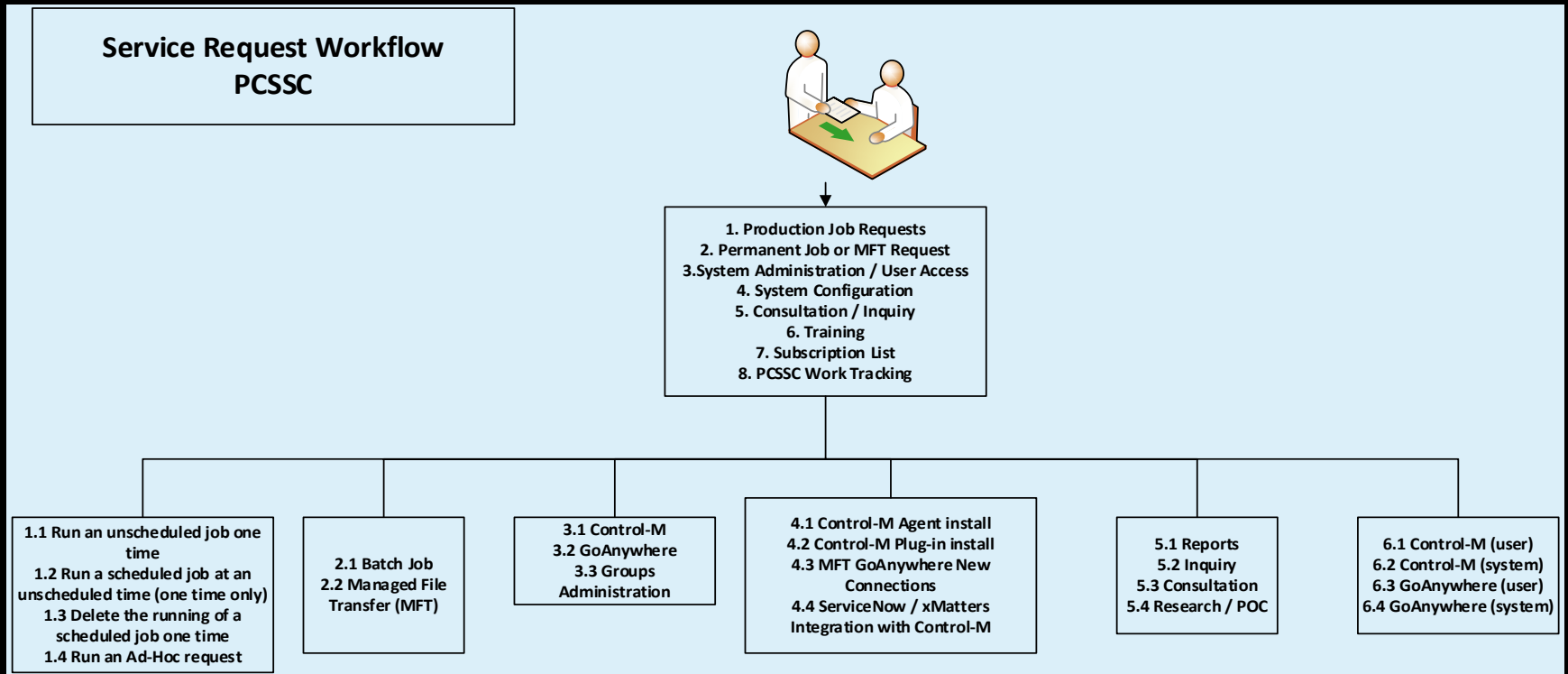
ITIL PROCESSES



ITIL PROCESSES

- Support for testing in QA and promotion to Production
- Support Disaster Recovery
- Automation of ServiceNow Incident (job failures) tickets
- Working on integration between multi-campus ServiceNow instances for Incident and Service Request Management
- Implementation of SLA agreements

ITIL PROCESSES



FUTURE

- Workload Change Manager
 - Ability to quickly build accurate workflows that adhere to enterprise-defined standards that are automatically enforced
 - Available as web tools for developers to interface with Liaisons
- Self Service
 - Simple, role-based interface that enables business users to see information they need, such as transaction processing status
 - Available for Functionals to manage adhoc requests or see the progress of their workloads
- PCSSC Website <http://test-pcssc.pantheon.berkeley.edu/>



GETTING ON BOARD

- WHEN: Now
- HOW:
 - Determine business requirements for conversion and automation
 - Determine resource requirements
 - Determine Costs
 - Implementation costs, which can vary
 - Yearly costs – Based on average share of effort
 - Create SLA
 - Implement

GETTING ON BOARD

- So, anyone interested?
- *Anyone want to save money?*
- Please sign sheet and PCSSC will contact you

QUESTIONS



CONTACT INFORMATION

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