

IOT Data Center Operations, Production Control, DCM - 2023

Who We Are:

Indiana Office of Technology – Computer Operations. We are an 18-member team and are staffed 24x7. We provide production control and batch scheduling across mainframe and distributed systems, systems, and data center monitoring, after hour's level-1 helpdesk support and escalation, along with mainframe billing support, for IOT. As an aggregate, we process nearly 95,000 jobs per week and are responsible to ensure these processes complete successfully. Responsibilities include defining and maintaining the CA7 database and scheduling software, problem determination, and prospective diagnosis of potential issues that could impact 100,000 of jobs that are defined and in production. These include the production business processing for DOR, DWD, DCS, IEDSS, and ISETS, FACTS, IOT, and others. All these processes are required to be completed in relatively small window of time and require vigilance to ensure the processes are completed on time, to allow online processing for the following business day. Computer Operations has now incorporated the Network Operations Center responsibilities into our daily functions. This requires the monitoring of 1320 network connection locations, contact with customers and or Internet Providers for that location and facilitating resolution responses, opening, updating, and closing tickets on issues.

Our Mission:

To provide 24 x 7 operational support for critical systems and infrastructure, for IOT and the agencies we support. We host and support both IOT's and Auditor of State mainframe environments, both here and in our disaster recovery location. We serve as the first point of contact for IOT and other state agencies and are purposed with providing prompt, knowledgeable, and precise service, problem resolution, or escalation to Tier 2 or Tier 3 support. We ensure that production schedules complete on time and that they correctly defined and have met the customers' business objectives. When any hardware or software related event failure/warning occurs, we assess and solve, or properly escalate these issues to the responsible area of support. Finally, we are responsible monitoring and reporting security and environmental concerns and seeing these through to completion.

Department History:

Traditionally operations performed functions related mainframe processing. These included systems monitoring, physical tape processing, print processing, and jobs execution monitoring. Over time, and with changing technology, virtualization, automation, and outsourcing of print, the responsibilities shifted to a more production control related task. No longer are we hanging 5000 tapes a day and printing 150,000 pages of output. Today's operations creates controls, monitors, and repairs batch processing for the Mainframe, Windows, UNIX, AIX, and Linux platforms, and manage database functions for our CA7 automation application. Operations handle after hours help desk processes and administer mainframe billing. We monitor all video and are the first point of contact for those needing access to the Indy and Bloomington DR data center. We monitor and implement all Indy data center environmental functions. Power, Cooling, Electrical, Fire Suppression

Manager: David Adkins

What We Do:

- We provide: 24x7 onsite Data Center, Mainframe and distributed batch monitoring, Level 1 Helpdesk, Mainframe Billing Admin Support, production control, workload automation, maintenance, and scheduling.
- Application Support:
 - CA7 Applications
 - Define, Support, Research and solve abended or failed production processes and escalate these when necessary.
 - Provide support for multiple state agencies with implementation of new or changing batch cycles.
- Helpdesk Level-1 Support:
 - We triage and escalate all after hour's helpdesk related functions.
- Customer Service:
 - We are the first point of contact for production related issues. This includes scheduled batch processes, software support, JCL, and job restarts, Mainframe IPL's, server outage escalations.
- Consulting Services:
 - We offer CA7 consulting and implementation services for multiple state agencies who require automation for their batch and online processing.
- Network Operation Center support
 - Monitor and facilitate down network issues to currently 1320 satellite locations across the state.

Data Center (Server) Management

- Monitor and coordinate all data center activities (installation, configuration, removal, surplus)
- Ensure all hardware / firmware operates as designed. Coordinate and ensure all patch levels are maintained
- Ensure all electrical, cooling and infrastructure needs are addressed and within state codes.

Our Metrics:

We are required to have a 99.9% up time, and we meet this goal.

Our Customers:

All State of Indiana agencies and other institutions as agreed (Ball State, IU, City of Indianapolis, etc.)

Our Budget: \$1.5 Million

Our Growth:

Major Accomplishments:

- Implemented IEDSS Batch Processing Schedules
- Streamlined job processing for FACTS to enable better functional automation.
- Provide mainframe hosting services for AOS, FSSA, DCS, DOC
- Support, and Monitor IOT's and other State Agencies Production batch environments.
- Fully staffed, 24x7 operations provides single point of contact for problem escalation, systems monitoring, and security.

- Upgraded and successfully implemented redundant power for the datacenter.
- Upgraded video monitoring throughout the data center.
- Updated CA7 up to current CA7 12.1 version.
- Added IDMS18 Monitoring
- Incorporated NOC monitoring for all state satellite locations from 3rd party to IOT Data Center Operations.
- Implemented transition of GMIS PeopleSoft applications to CA7 Scheduling Solution.
- Selected a new enterprise scheduling solution platform.
- Upgraded Video replacing 12+ year old equipment.
- Added Cloud hosted VisitUs visitor sign in log replacing the paper logs used in past years.
- Upgraded video monitoring software to the most current version (Milestone Visual Client 2022 R3).

Current Projects:

- Migrate from CA7 Scheduling Solution to Control M Scheduling solution.
- Implement DOM Server Monitoring to all current and new Dell servers that will provide email notification to hardware issues. The basic function of this is in place but we are still learning all the tools and setting available in this software.
- Upgrade HP OneView to monitor all current HP servers and provide email notification to hardware issues. The basic function of this is in place but we are still learning all the tools and setting available in this software.