

Duke's Journey to Service Management

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Duke's journey – a brief history

- First try: exhortation and collaboration, but “paper in the drawer”
 - How do you implement a best practice against operational priorities?
- Second try: localized start with clear operational link within one unit
 - We've started from “Service Operation” and worked backwards

Principles for our service management activities

- Firefighting vs. fire suppression
- System alarms are great data... use them
- Incentivize transparency (documentation, operational handoffs)
- Process > tools

Key service management steps

- Created “Service Operations Center” team
- Thoroughly documented – then used it
- Implemented change management
- Improved outage reporting and post-incident review
- **Biggest win: service classifications**

Classifying our services

	Essential	Critical	Sensitive	Tolerant
Key definition	Impact on life safety or emergency communications	Critical to enterprise operation with brand, financial impact due to outages	Directly supports campus day-to-day operations	Supports non-sensitive operations, typically of a single department or unit
Service alerts, outages addressed	24x7	24x7	24x7 to next business day (<i>by SLA/owner discretion</i>)	Business hours
Service recovery goals*	< 15 mins	< 2 hrs	< 4 hrs (<i>unless SLA varies</i>)	1 business day
Service design best practices	2 data centers Active/passive failover Multi-site replicated storage	2 data centers Manual failover Multi-site replicated storage	1-2 data centers Storage may be in single-site	1 data center Storage replication not required

Change Management standards

Service Design standards and expectations

Incident Management guidelines

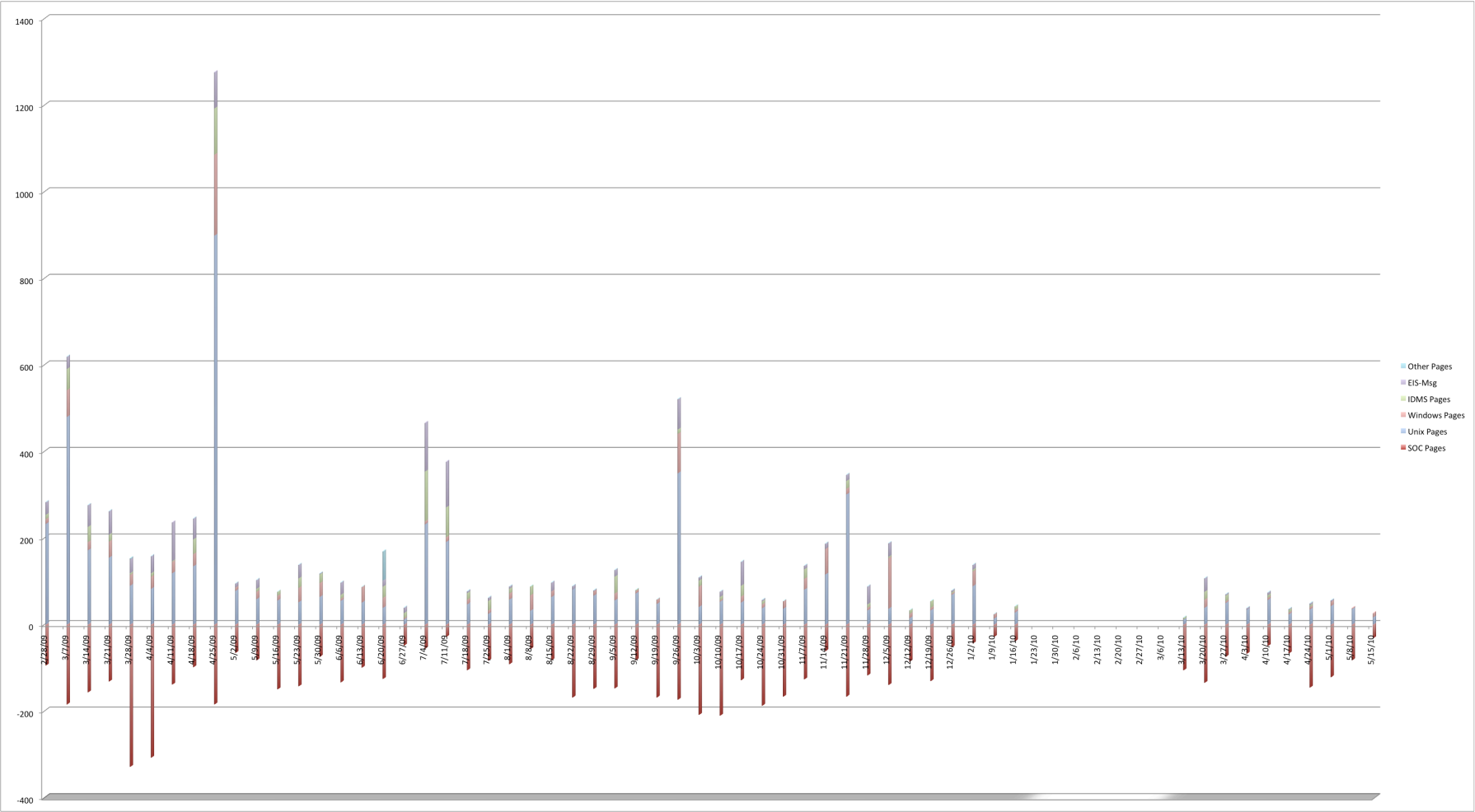
Post-Incident Review and metrics collection

Monitoring, event notification and 24x7 operation

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Key definition	Impact on life safety or emergency communications	Critical to enterprise operation with brand, financial impact due to outages	Directly supports campus day-to-day operations	Supports non-sensitive operations, typically of a single department or unit
Service alerts, outages addressed	24x7	24x7	4x next business day (by SLA/owner discretion)	Business hours
Service recovery goals	< 15 mins	< 2 hrs	4 hrs (next business day)	1 business day
Service design best practices	2 data centers Active/passive failover Multi-site replicated storage	2 data centers Manual failover Multi-site replicated storage	1-2 data centers Storage may be in single-site	1 data center Storage replication not required

Service Classifications

Measuring results by events



Key takeaways from Duke's journey

- Just thinking about “services” matters
- Start small, get early wins, make new friends
- “Doing ITIL” → analysis paralysis
- Is everybody benefitting from the effort?
- Pick a clear definition of success
 - “Stuff doesn't go down as much anymore.”