# Eastman Chemical Company

IT Monitor: Process improvement for email

EASTMAN

# Eastman Chemical Company

## Who We Are: Facts and Figures

# Eastman At-A-Glance

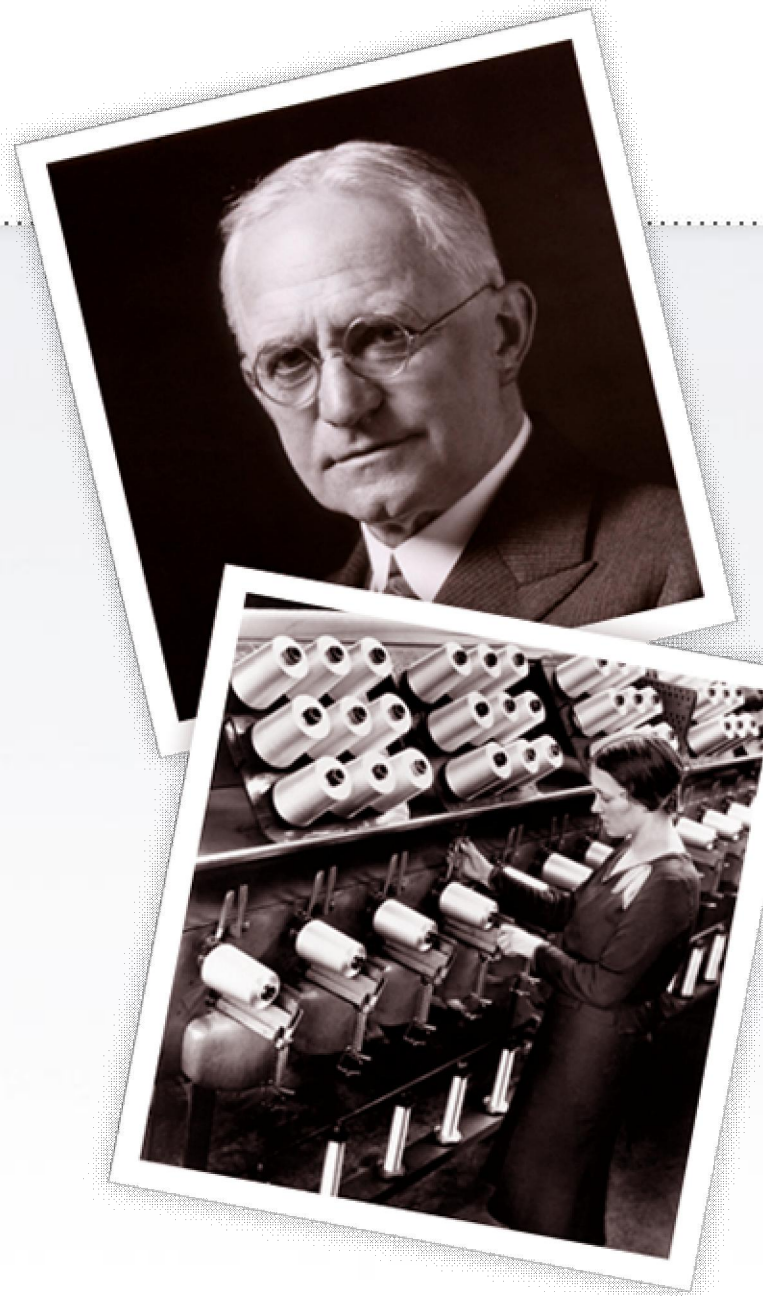
- A global manufacturer of chemicals, plastics and fibers
- Leading producer of differentiated coatings adhesives, and specialty plastics products
- World's largest manufacturer of PET polymers for packaging
- Leading supplier of cellulose acetate fibers
- 2006 sales revenue of $7.5B
- Corporate headquarters in Kingsport, Tennessee


EASTMAN

# Our history

**Highlights:**

- Began in 1920 when George Eastman acquired wood distillation plant in Kingsport, TN
- Expanded manufacturing production to include new products such as:
  - *Acetate yarn and acetate tow*
  - *Acetic anhydride*
  - *Cellulosic plastics*
  - *Polyethylene terephthalate (PET) polymers*
- Became first to operate a commercial coal gasification facility in U.S. in 1983
- Won Malcolm Baldrige National Quality Award in 1993
- Spun from Kodak in 1994; became independent, publicly traded company on the NYSE
- Posted record sales of $7.5B in 2006



EASTMAN

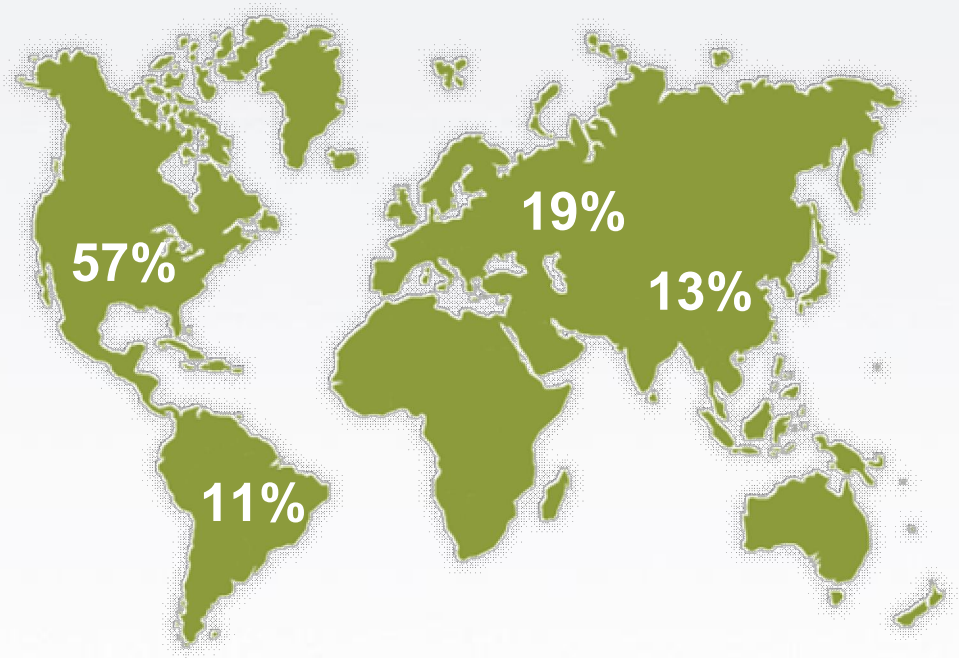
# And 11,000 employees around the world

EASTMAN

# We serve diverse markets and sell our products in all regions of the world

## 2006 Sales Revenue by Markets


## 2006 Sales Revenue by Region




EASTMAN

# Eastman Chemical Company

## Information Technology: A Changing Paradigm

# Eastman and OSIsoft

- First PI implementation in the early 1990s
- Adopted as our corporate manufacturing standard in 1998
- Standard implementation throughout all our manufacturing facilities
- OSIsoft has been an important partner for manufacturing
- Eastman's IT department has been an integral part of those implementations and part of that partnership

EASTMAN

# The Catalyst

- Infrastructure leadership had a strong manufacturing and PI background
- They asked the right questions whenever we had an incident….
  - How much data do you have?
  - What does the data normally look like?
  - How can we pro-actively identify problems – or potential problems?
  - How can we prevent problems?

# The Need

- You call IT to report a problem
  - Do they already know there's a problem?
  - Do they ever seem to know the cause?
  - Do you ever hear:

*"Everything's OK here, the problem must be on your side!" ?????*

# The Crux

- No or very short term historical data
- No process view of an IT service

# Our Approach

- Eating our own dog food

- Use OSIsoft's IT Monitor to:
  - Develop a centralized repository for infrastructure monitoring data
  - Drive an SPC and closed loop approach to IT infrastructure monitoring
  - Eliminate silos within IT

EASTMAN

# Email Process Implementation

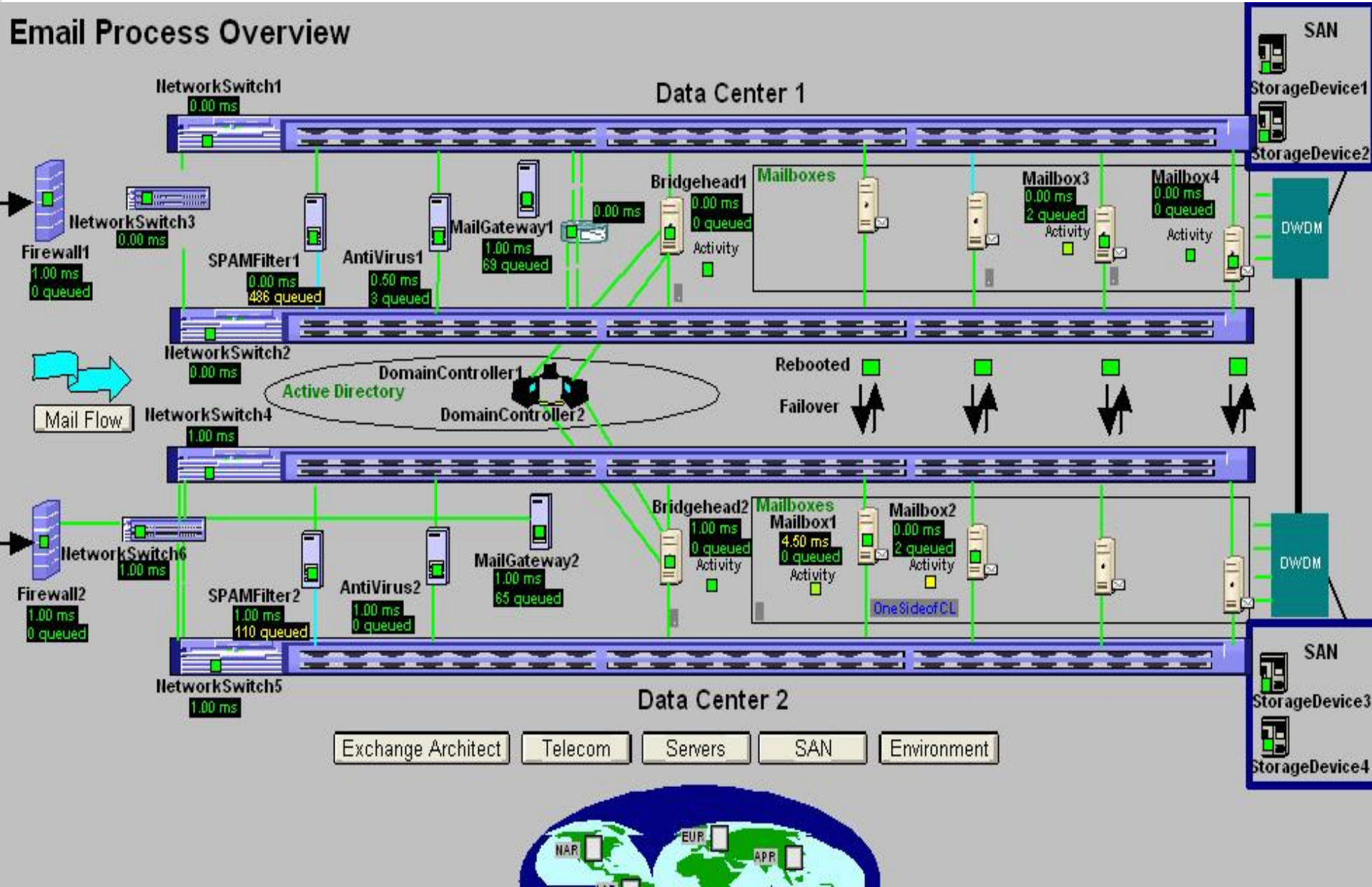
- Cuts across the grain
  - Servers
  - Telecommunications
  - Storage
  - Environmental
- Utilizes a variety of IT Monitor interfaces
  - Perfmon
  - Ping
  - SNMP
  - Syslog
  - TCPResponse

# Paradigm Change

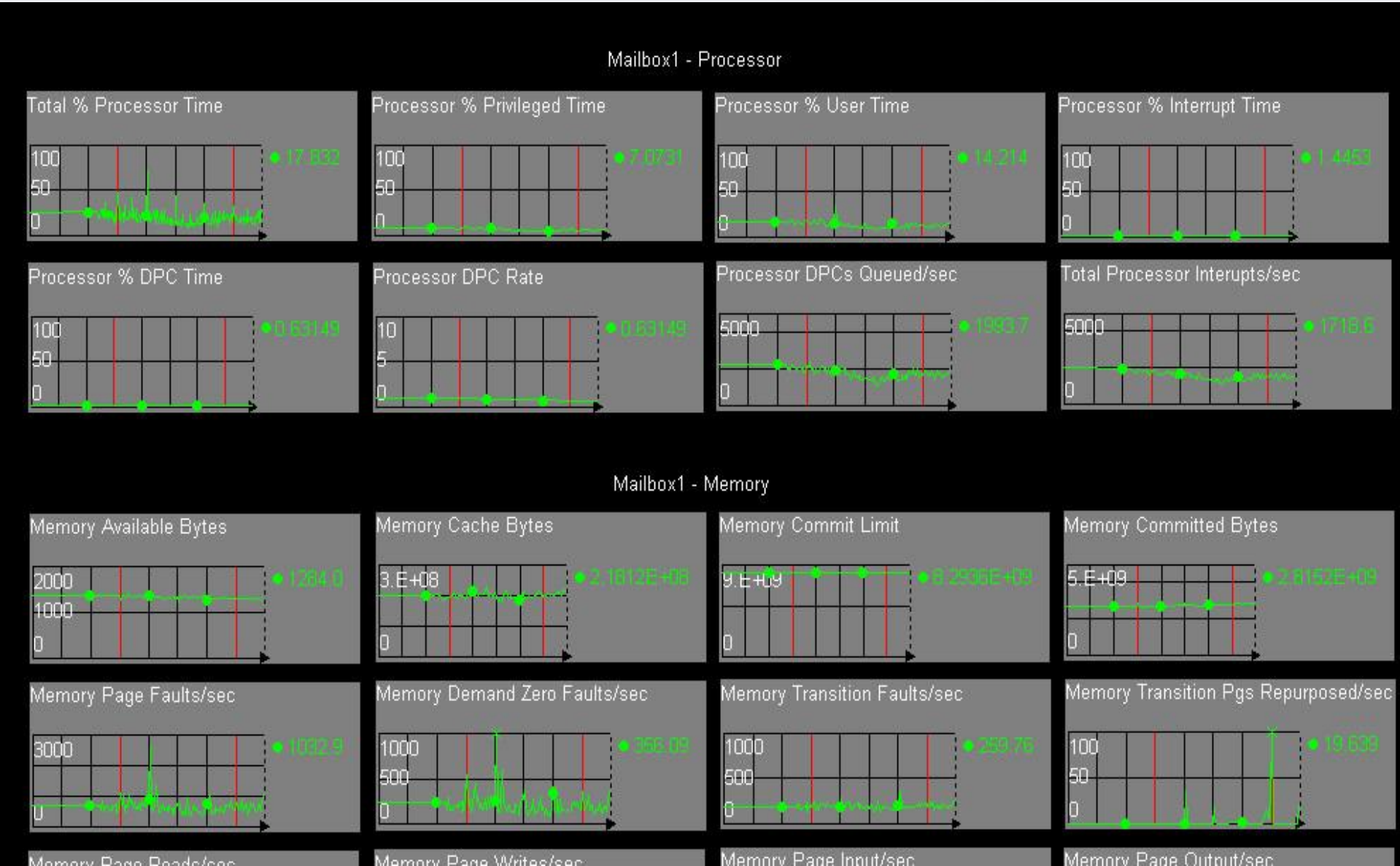
- IT Service as a PROCESS
- Email is not an application – it's a SYSTEM
- Process Map
- Failure Modes and Effects Analysis
- Co-operation across silos
- Broad base management support

EASTMAN

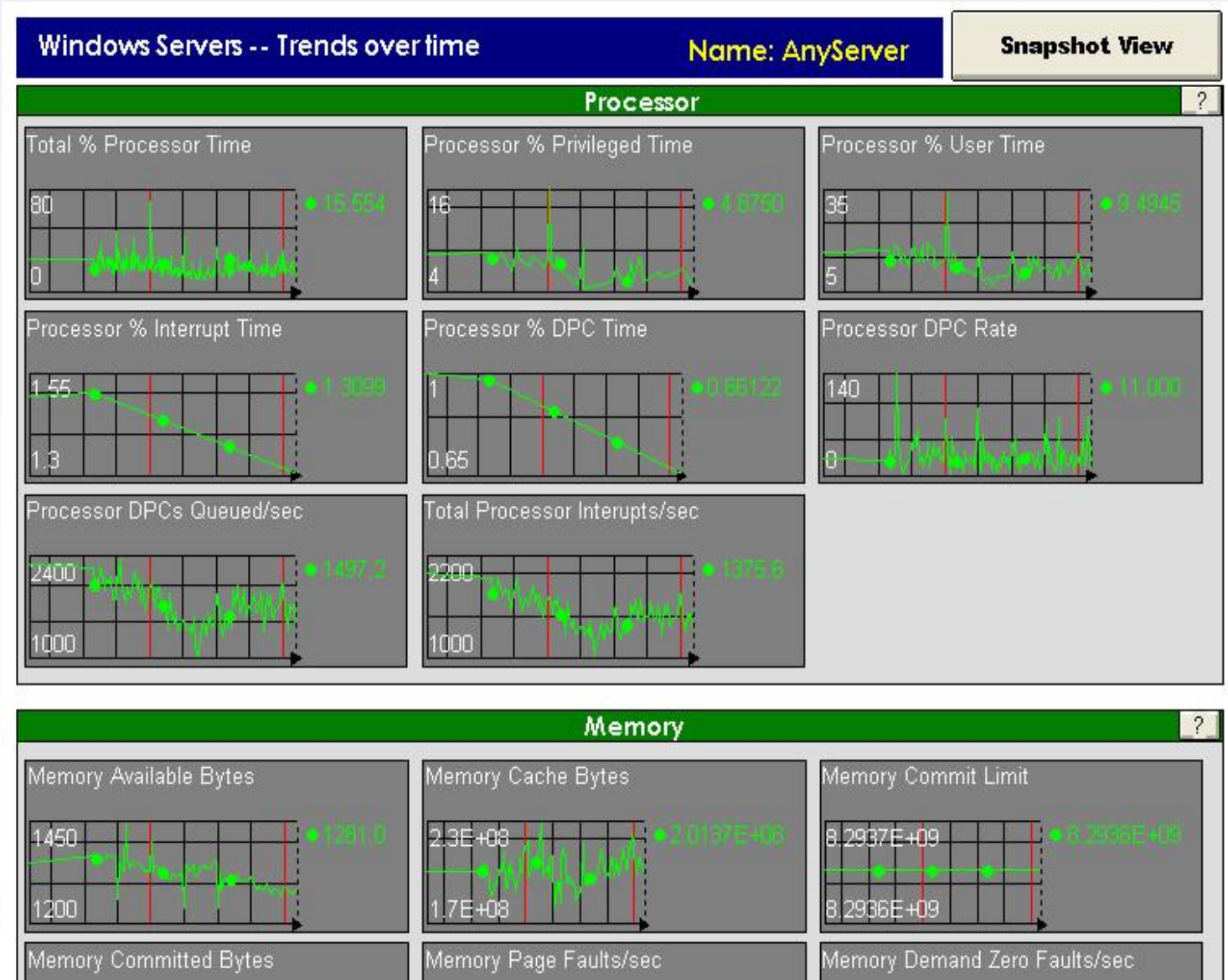
# Email Process Overview



# Email Drill-Down: Exchange Server



# Operating System - Historic

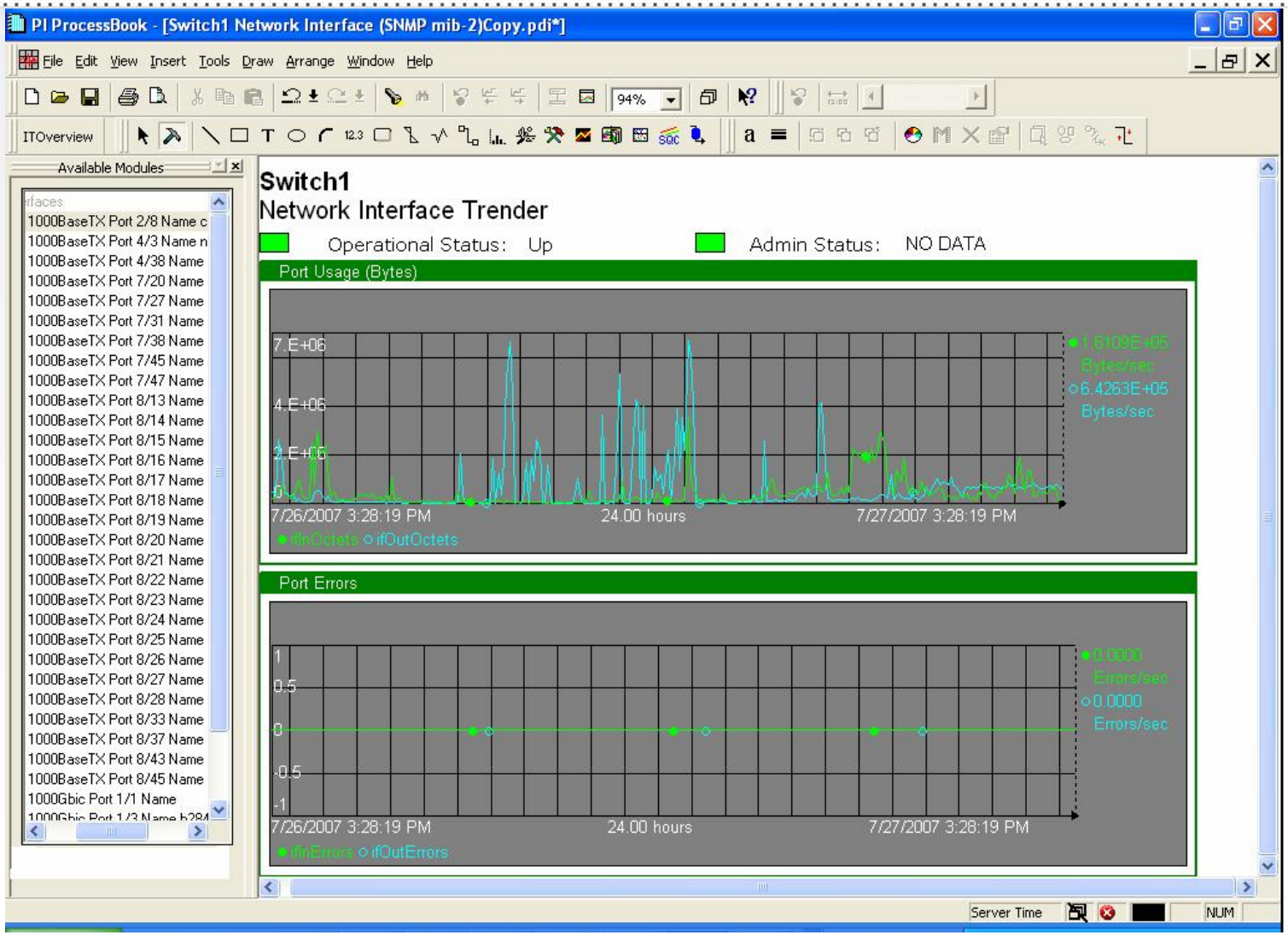


# Windows Servers Implementation

- Types of views
  - Real-time
  - Historic
- Types of stats and information
  - Operating system
  - Applications
  - Hardware
  - Links to documentation

EASTMAN

# Email Drill-Down: Switch




EASTMAN

# Statistical Process Control

- Using SPC to learn more about our PROCESS
  - Developing control strategies
  - Reducing unexpected downtime
  - Reducing unplanned work
  - Closed loop control
- Capacity planning
- Availability design

EASTMAN

# What's Next?

- Environmental
- WAN
- LAN
- Servers
- Storage
- SAP

EASTMAN

# Questions

EASTMAN