

A decorative graphic in the top left corner consists of several overlapping circles of various colors (yellow, orange, red, purple, blue) that are divided into segments, resembling a stylized sun or a cluster of data points.

IBM Automation Control for z/OS V1.1.1

Uwe Gramm

Product Manager, System Automation & NetView

Wiltrud Rebmann

Release Manager, System Automation for z/OS



z Systems mainframes require easy automation to simplify data center operations



z Systems operations continue to focus on ease-of-use

Today's IT Challenges:

- Considerable manual effort, resulting in confusion and errors
- Fast changing business requirements needing application changes
- Availability outage until problems solved manually by operations
- Over provisioning of resources – human and computer
- Challenging business requirement for 100% availability



z Systems automation solution needs to provide quick ROI

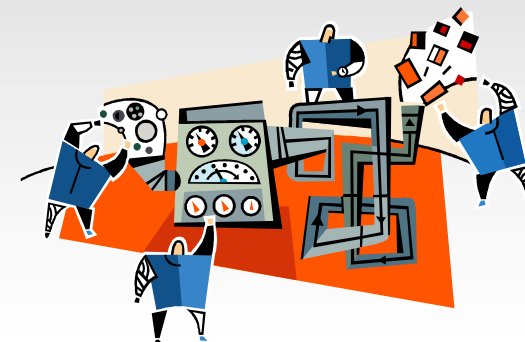


How are companies thinking about automation today?



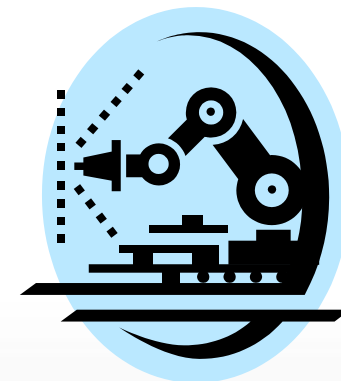
Customer Concerns:

- Regular activities that need fast response
- Minimize dangerous human activities
- Reduce risk of outages based on human error
- React to unexpected events without having a disaster
- Ability to support different types of activities without change
- Increase number of events managed with same staff



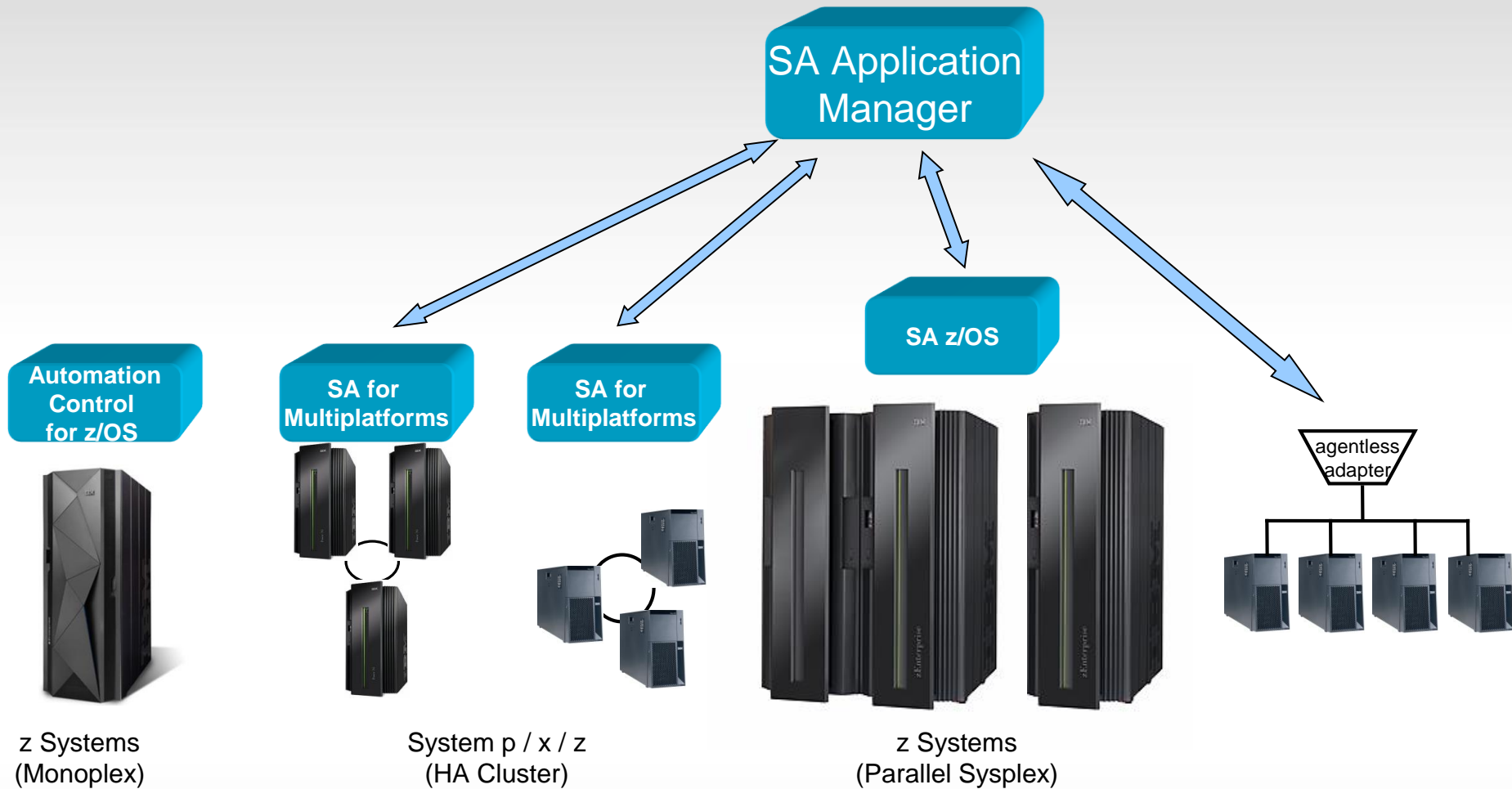
Automation Control addresses these concerns.

- Provides fast response to planned events
- Minimizes human interactions for error situations
- Add new capability without having to add resources





The IBM System Automation Family



IBM Automation Control for z/OS (IACz) targeted at Mid-market single System z environments

- ➔ Entry-level Automation solution on z/OS to start, stop, monitor, and recover z/OS Monoplex environments as well as local System z HW resources
- ➔ Automation Control for z/OS is an Easy to operate solution without additional software pre-reqs

Easy to install & configure - *Smart Configuration Assistance* dramatically improves Time To Value

Policy-based & Goal-driven – Maximize efficiency and availability of critical systems and applications.

Secure – Protect your Systems with role based security, simplified operations, and improved usability and auditability

Integrated – With z/OS and IBM Tivoli solutions to improve efficiency and availability



zEnterprise BC12



Automation Control for z/OS = Application Automation + Hardware Operations

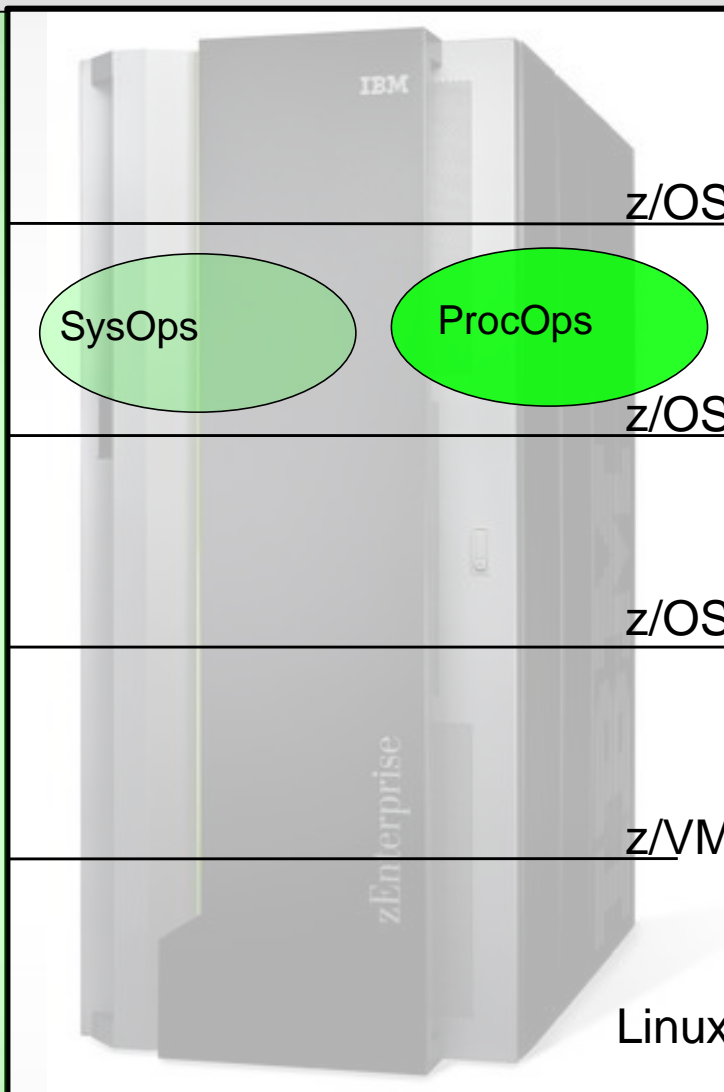


Application Automation (SysOps) controls:

- z/OS Address Spaces
 - z/OS Applications
 - USS Applications
 - Monitors
- Groups of Applications
- Dependencies between applications, groups and monitors
- Runmodes
- Schedules

SysOps provides:

- Easy Configuration
- Policy-based Administration
- Goal-Driven Operations



ProcOps controls:

- CPC
- local LPARs
- local operating systems (z/OS, z/VM, Linux on z)
- Activation Profiles
- Capacity
- zBX Blades
- zBX Virtual Servers

ProcOps provides:

- Single Point of Control for System z hardware operations
- Hardware status changes and alerts

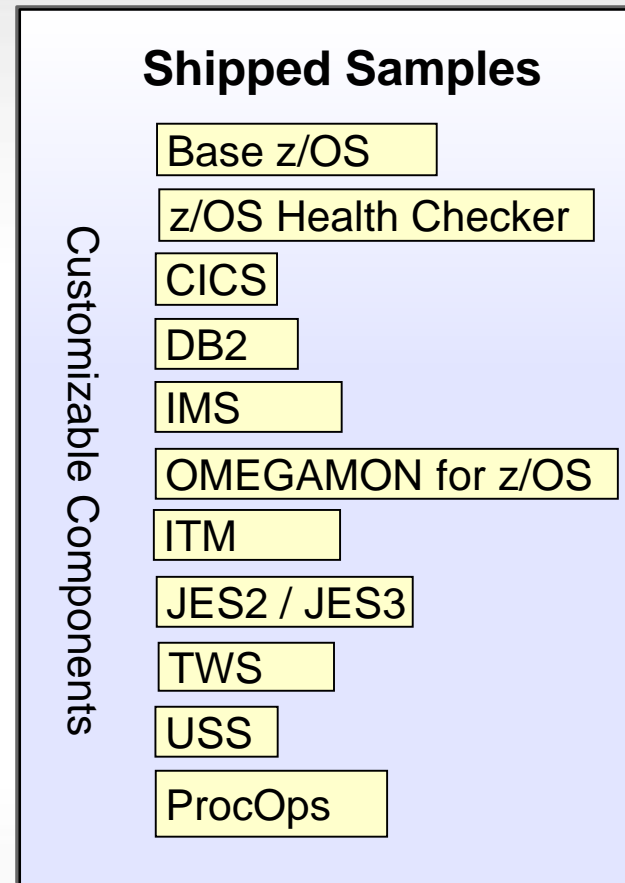


IACz provides unique, easy-to-implement and execute policy-based methodology



Goal Driven Automation defined via Policy

- **Policy based automation** w/o need for programming
 - Faster time-to-value
 - Less maintenance cost
 - Significantly reduces human errors
- **Intelligent relationships**
 - Management of entire application with a mouse click
 - Spans LPARs
 - Controls orderly startup and shutdown
- **Sophisticated Application Grouping**
 - Defined application dependency
 - Enables move of entire application either automatically or manually
 - Restart & Failover rules





What is the power of an automation policy?

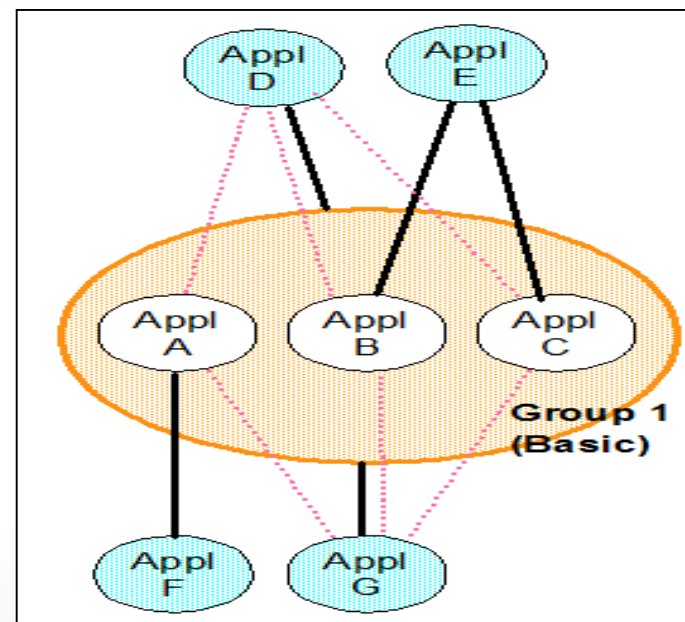
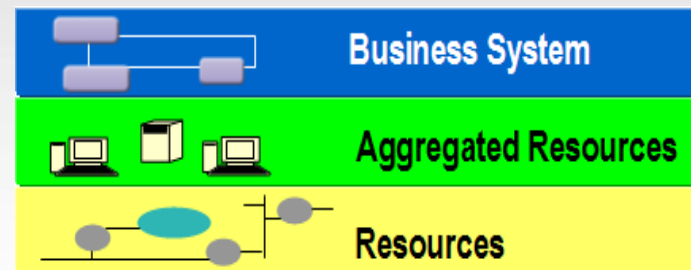


Easier definition through 'fill in the blanks' application

- Pre-defined automation for common applications
- Faster time-to-value
- Elimination of coding errors and easy to maintain
- Easy to build 'business view'

Consistent, reliable, automated actions

- Testing of abnormal condition actions is difficult and sometimes incomplete with 'programming' solutions
- Policy definitions can be re-used, copied and cloned for similar requirements elsewhere in the enterprise
- Management of entire business applications, rather than individual resources





What is the power of goal-driven automation?



Policy defines goals

- Availability: Online, offline

Goals can be changed

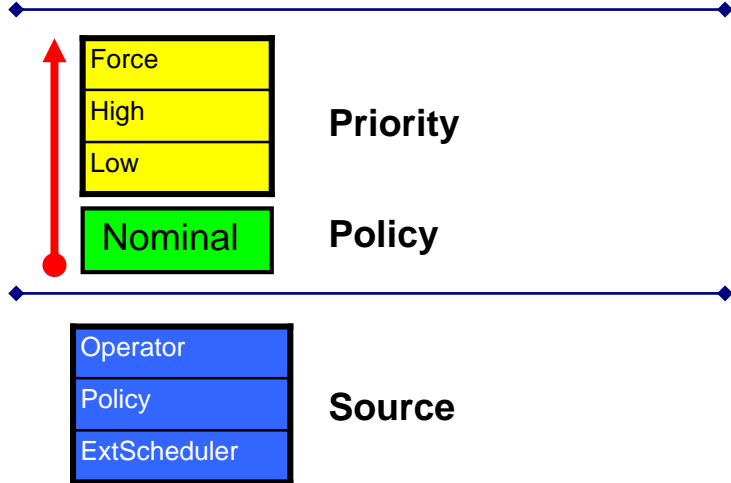
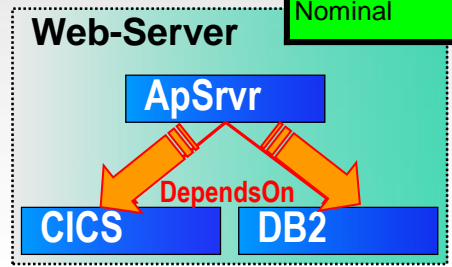
- Example:
 - Start or stop request

Automation requests are persistent, have a priority, have a source

- Reduces operator errors



Observed
Desired
Nominal



Goal-driven automation keeps system in line with business goals, dependencies, configuration, and status



The Value of Policy-based & Goal-driven Automation



- Starts, stops, monitors, and recovers z/OS applications/resources
- NO programming required
- Smart Dependency Management
 - Automated resource relationship management in heterogeneous, multi tiered application environments
 - Orderly controlled startup and shutdown
 - Orderly controlled recovery
- Sophisticated Resource Grouping allows for
 - Easy management of entire application with a mouse click
 - Management of applications as a whole
 - Putting your focus on what matters rather than technology



Automation Control for z/OS V1.1.1 simplifies z Systems operations



- **Increased efficiency** - Intuitive Configuration Assistance dramatically improves Time To Value with a 80% decrease of base configuration
- **Reduced risk of application downtime** - Proactively improved system availability and performance through policy-based management of looping address spaces
- **Increased visibility and improved application availability** - Improved performance management with coordinated application pacing allowing for optimal CPU balance.
- **Improved Time to Value** - Comprehensive security of the automation environment through an intuitive role-based approach
- **New level of user productivity** - Modern application management through consistent policy customization support for multiple users to work in parallel. Enabling multiple users allows for much better flexibility and reduced time for change management.

Most Important Features Comparison



Component	AF/OPERATOR	IACz	SA z/OS + NetView
GDPS Active/Active	no	no	no
Network Management Console	no	no	yes
Network management	no	no	yes
Full Sysplex Automation	no	no	yes
CANzLog	no	no	yes
I/O Operations	no	no	yes
GDPS support	no	no	yes
E2E Automation	no	no	yes
Full Screen Automation	yes	no	yes
NETLOG	no	yes	yes
Processor Operations	no	Limited to local CPC	yes
Status Display Facility	no	yes	yes
SA IOM Adapter	yes	yes	yes
User defined Automation Table (AT)	yes	Limited to 3.000 chars	yes
Policy based AT	no	yes	yes
Message Revision Table	yes	yes	yes
Command Rev. Table	yes	yes	yes



Additional Information ...



Automation Control for z/OS

Wiki:

<https://www.ibm.com/developerworks/community/wikis/home?lang=en#/wiki/IBM%20Automation%20Control%20for%20zOS>

Homepage:

<http://www-03.ibm.com/software/products/en/ibm-automation-control-for-zos>

Forum:

<https://www.ibm.com/developerworks/community/forums/html/forum?id=29e48eab-e754-4aec-ad15-a3d01d4035bd>

Service Management Community:

<https://www.ibm.com/developerworks/servicemanagement/z/index.html>