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SAS Grid Migration - Challenges, Solutions and Learnings by Amol Waykar and Eric Brinsfield

Introduction :

Across

Platforms

Organizations are dealing with large amounts of data now, but how that big data impacts your business depends on what you try to do with it. Facing tight timelines, healthcare and pharmaceutical companies also have many SAS users, a mixture of simple and complex analyses, and long and short running programs. Many are shifting the workload to distribute computing in increased reliability, easy expansion, balance utilization of CPUs, and decreased overall job run-times. Migrating to the SAS Grid can pose some challenges, but with careful planning and use of simple tools, the hurdles will be minor. Our poster attempts to highlight some of the snares you may encounter along the way.

Across platforms

- FILE/DIRECTORY STRUCTURE
- SYSTEM/ ENVIRONMENT VARIABLES
- OS PLATFORM UTILITIES
- ADHOCH BUILD OS SCRIPT

Code Handling

- DDE (DYNAMIC DATA EXCHANGE) FUNCTIONALITY
- SAS STATEMENTS THAT SPECIFY A FILE OR DIRECTORY PATH
- BACK SLASH AND FORWARD SLASH
- CALLING OS OR EXTERNAL COMMANDS
- SYSTEM MACRO NAMES AND ENVIRONMENT VARIABLES
- DBMS = EXCEL OPTION FOR EXCEL
- POP-UP WINDOW OR DISPLAY STATEMENTS

Business process changes

32Bit/

64Bit

Change

VALIDVARNAME

VALIDFMTNAME

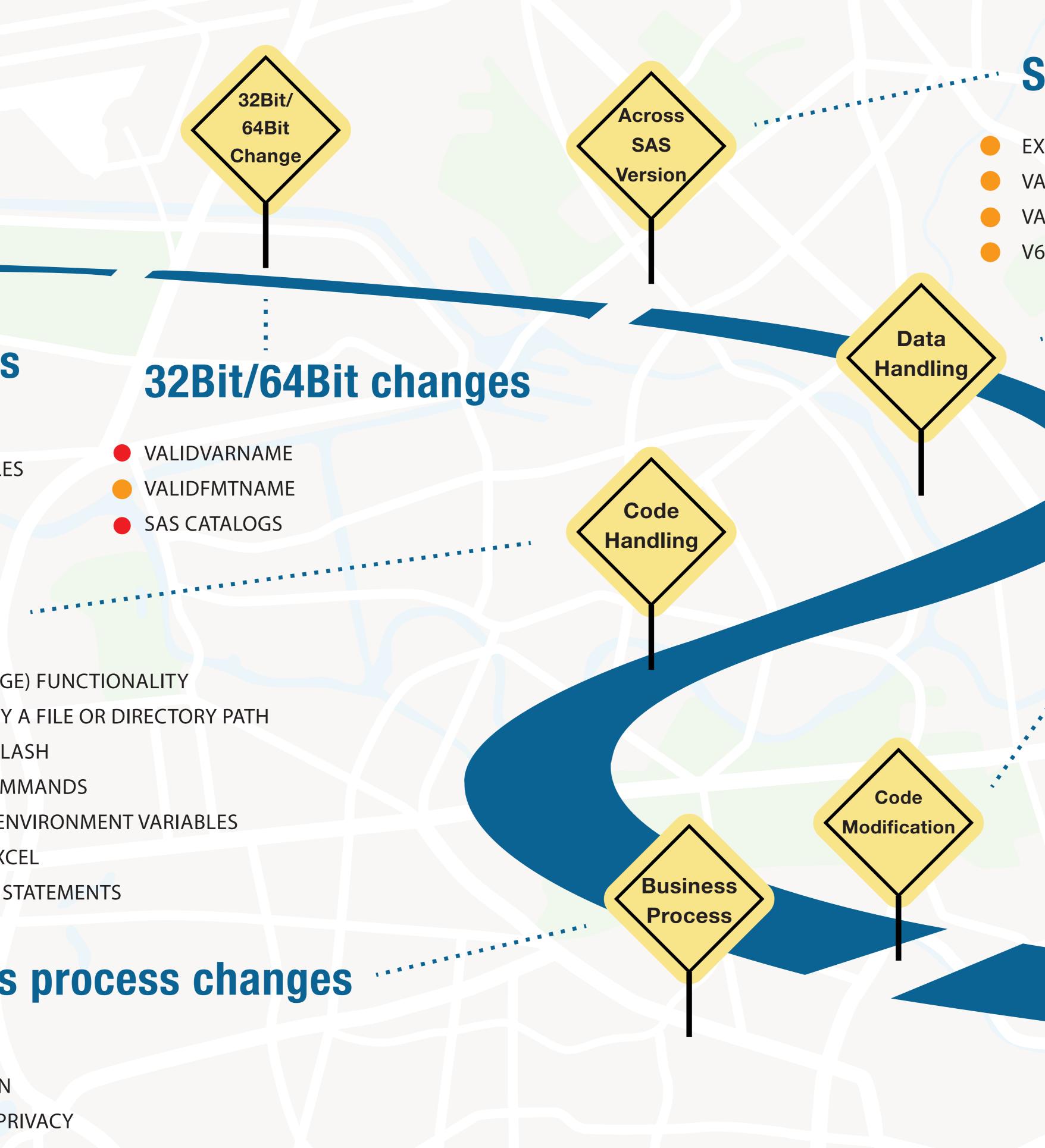
SAS CATALOGS

SECURITY

- AUTHENTICATION
- PERMISSIONS & PRIVACY

Learning :

Many of the challenges have less to do with SAS Grid and more to do with sizes, SAS versions, change management, validation, and the opportunity to change old procedures. With proper planning, adequate training, and some basic tools, migration can proceed painlessly.



SAS version changes

EXTENDOBSCOUNTER VALIDMEMNAME VALIDFMTNAME V6CREATEUPDATE

Data Handling

 INCOMPATIBLE DATA SET ENCODING SAS CATALGS

Code Modification

- DM STATEMENTS
- ENDSAS AND ABORT STATEMENTS
- VALIDVARNAME
- MACRO CATALOG NAMING
- FORMAT CATALOG
- MACRO NAME CASE CHANGE

Operation

Process

OLE DB API

Operation process changes

- JOB SCHEDULING
- JOB MONITORING
- PERFORMANCE MONITORING
- REGIONAL OVERLAP DURING JOB PROCESSING
- INTERFACE WITH REMOTE FILE SYSTEM AND SERVERS OUTSIDE GRID

C-Wise

- Won't work on SAS Grid and across platform
- Require changes to work on SAS Grid and across platform
- May not be required, since SAS Grid comes with this feature to manage it better