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## Stored Processes

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# Agenda

- Define Stored Processes
- Discuss benefits
- Describe creation and execution
- Execute Stored Process from BI environments
- Use EG to Create Stored Process

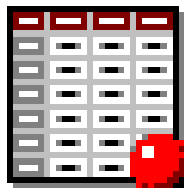
# What is a Stored Process?

- A SAS program
- Hosted on a server and described by metadata
- Executed by many of the new applications in the SAS<sup>®</sup>9 Enterprise Intelligence Platform

# Capabilities of Stored Processes

Name	Sex	Age	Height	Weight
Albert	M	14	69.0	112.5
Alice	F	11	76.5	84.0
Barbara	F	11	61.5	98.0
Carol	F	14	62.8	102.5
Henry	M	14	63.9	102.5
James	M	12	57.2	83.0
Jane	F	12	59.8	84.5
Jared	F	15	62.5	112.5
Jill	M	13	62.5	84.0
John	M	12	56.0	98.5
Juan	F	11	51.3	50.5
Judy	F	14	64.3	90.0

**SAS ODS Output**



**SAS Data Sources**



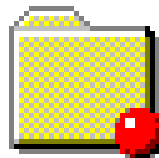
**Results Package**



**External Files**



**E-mail**

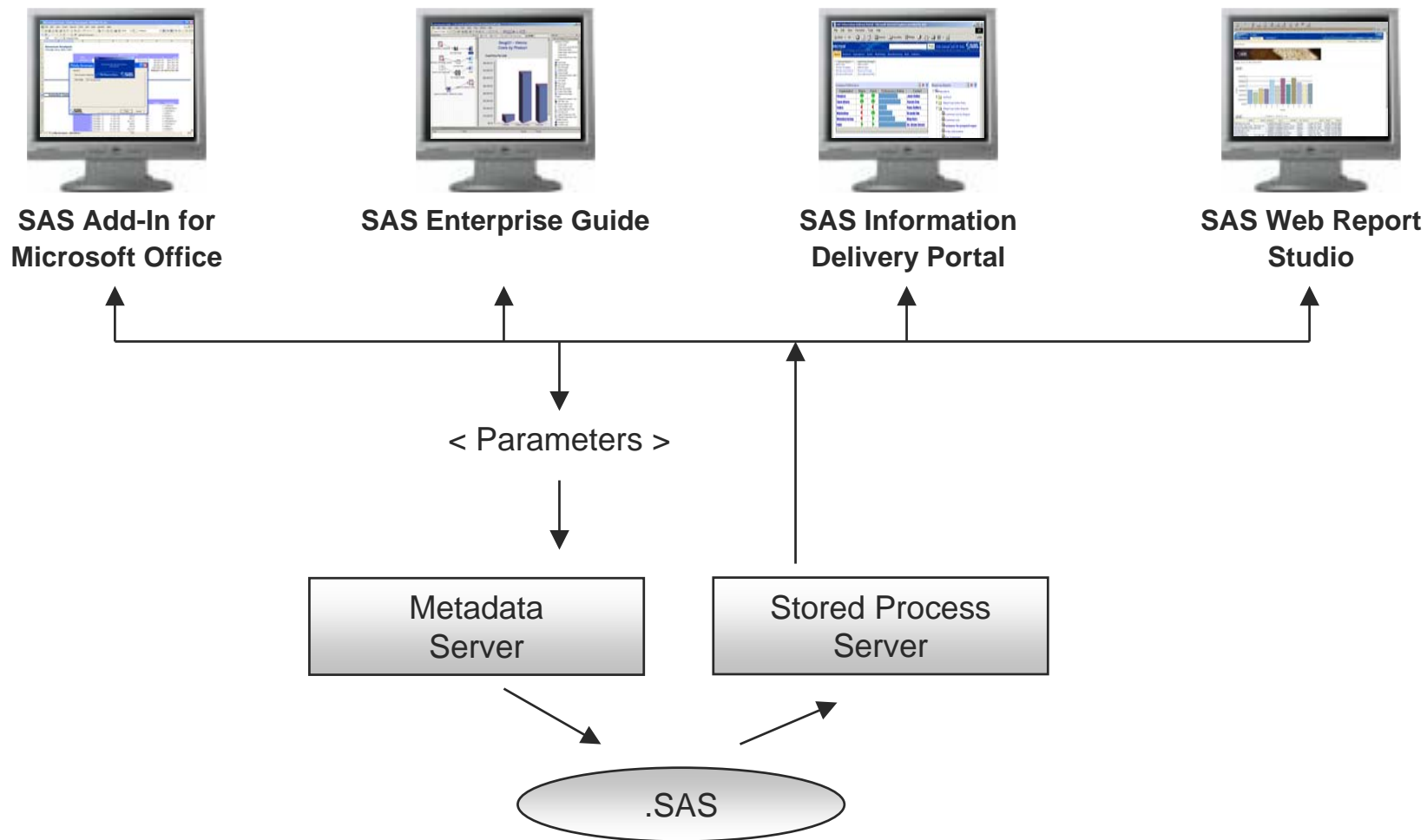


**SAS Catalog Entry**

# Advantages of Stored Processes

- Can be invoked by end users
- Can accept user input parameters for dynamic execution
- Code is not embedded into client applications, so can be invoked from multiple applications
- Security and application integrity ensured through Metadata
- Accessed on demand so changes are immediately reflected

# Stored Process Execution



# Stored Process Macros

- **\*ProcessBody;** comment
  - Initiates input parameter processing (if any exist)
- **%STPBEGIN**
  - Initializes the Output Delivery System (ODS) to generate output from the stored process
- **%STPEND**
  - Terminates ODS processing and completes delivery of the output to the client or other destinations

# How are they created?

- Create Stored Process
  - Write or modify .SAS program, using Base SAS, Enterprise Guide, etc., including Stored Process Macros
- Register the Metadata
  - Management Console, or Enterprise Guide
- Run the Stored Process
  - Test and Modify as required



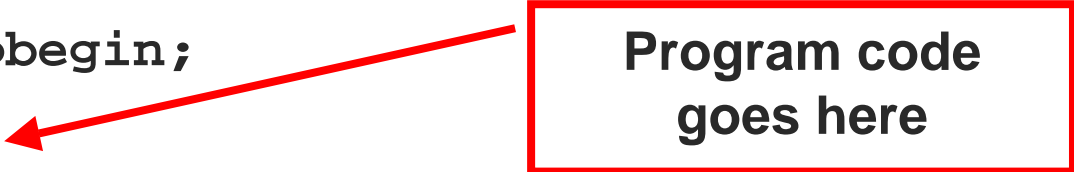
# Stored Process Syntax

```
libname orionstp meta port=8561  
        protocol=bridge library="SP_Orion"  
        repname="Foundation";
```

```
*ProcessBody;
```

```
%stpbegin;
```

```
%stpend;
```



Program code  
goes here

# Demonstrations

- Execute Stored Process
- Investigate Components
- Create Stored Processes in EG
- Leverage MS Office with Stored Processes

# Q & A

- Questions?