AUTOSYS

BY

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What is Autosys?

The best definition of AutoSys is

"AutoSys Workload Automation is a multi-platform automated job control system

that provides the capability of scheduling, monitoring, and reporting of AutoSys jobs for enterprise applications."

• The jobs can reside on an Autosys configured machine attached to a network

What is an Autosys job?

- A single action performed on a validated machine

- Autosys-jobs can be defined using GUI or JIL

- Any single command , executable script or NT batch file . It includes a set of qualifying attributes ,conditions specifying when and where a AutoSys-job should be run.

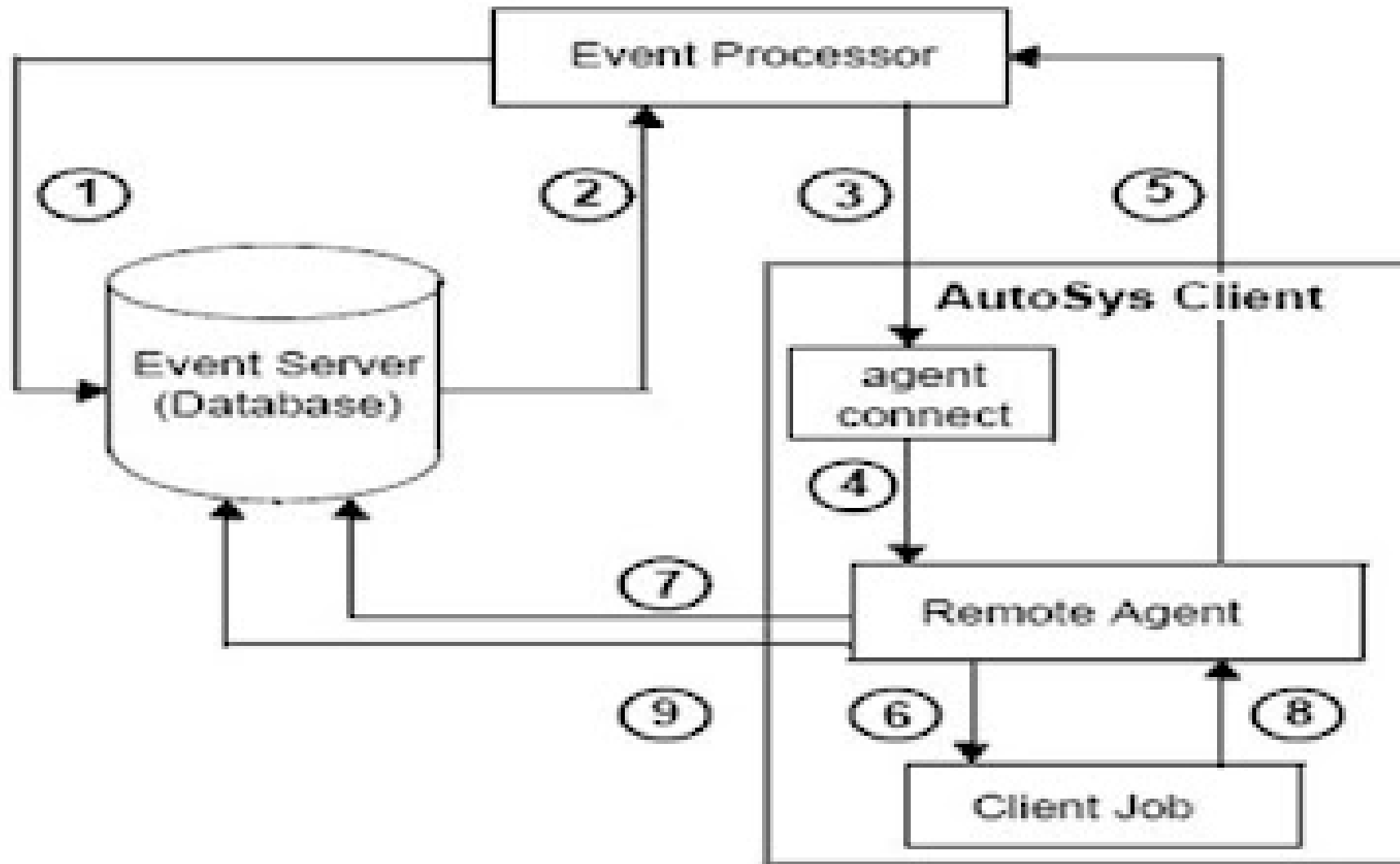# Methods of defining Autosys jobs

1. Using Autosys GUI
   • Autosys GUI allows to set the attributes that describe when , where and how a AutoSys-job should be run.
   • GUI Control Panel is used to define AutoSys-jobs Contain fields that correspond to Autosys JIL sub-commands and attributes.

2. Using job Information Language(JIL)
   • A specification language that has its own commands to describe when , where and how a AutoSys-job should be run.
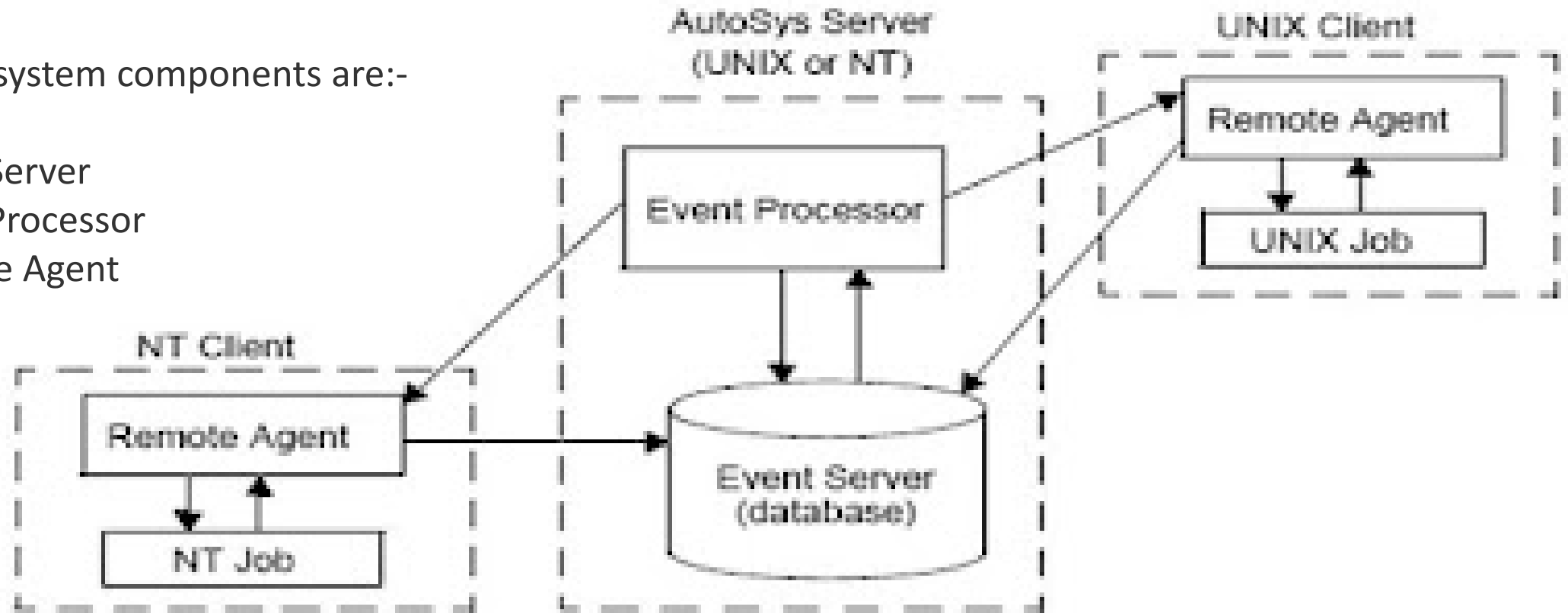   • The attributes are set b JIL sub-commands

Workflow

Components

Autosys system components are:-

- Event Server
- Event Processor
- Remote Agent

Components

- **Event Server (or Autosys Database)**

o Data Repository that stores Autosys system information , events and job definitions.

o The Autosys Db is termed 'Data Server' which describes a server instance

- **Event Processor**

o Interprets and processes all the events it reads from the Autosys Database

o A program that actually runs Autosys

o Scans the database for processing events. Checks if the events satisfy the starting conditions of the job and the determines the actions

- **Remote Agent**

o Temporary process started by the event processor to perform a specific task on a remote machine

o It starts the command specified for a given job, sends running and completion information about a task to the Event Server

o If it is unable to transfer the information, it waits and tries until it successfully communicates with the Db

Utilities

• Autosys provides a set of commands that run essential utility programs for defining , controlling and reporting on jobs .

• For example the autorep command allows generating a variety of reports about job execution , and the sendevent commands allow manually controlling job processing.

• Additional utility programs are provided to assist in troubleshooting running monitors and browsers , and starting/stopping Autosys and its components.

• Autosys also provides database maintenance utility that runs daily by default

Alarms

• Alarms are special events that send notifications during situations requiring attention

• Addresses incidents that require manual intervention

• For example , a set of jobs could be dependent on the arrival of a file and if the file is long overdue. It is important that someone investigate the situation , make a decision and resolve the problem.

• Aspects of alarms include but is not limited to:-

o Alarms are informational only . Any action to be taken due to a problem is initiated by a separate action event.
o Alarms are system messages about a detected problem
o Alarms are sent through the system as an event

Events

• Since Autosys in Event-driven, it requires an event to occur on which the job depends , for a job to be activated by the Event Processor.

• The sources of these events can be:-

o Jobs changing status such as starting , finishing
o Internal Autosys verification Agents such as detected errors.
o Events send with the SENDEVENT command

• While processing an event , the Event processor scans the database for jobs that are dependent on that event

• If the event satisfies another job's starting condition , that job is run automatically and completion of that job can cause another job to be started , thereby making the jobs progress in a controlled sequence.

Machine Vs Instances

Autosys architecture has two types of machines:-

• Server Machine:
o The machine on which the Event Processor and Event Server reside

• Client Machine:
o The machine on which the Remote Agent resides and where Autosys jobs are run.

What is an Autosys Instance?

• A version of Autosys software running as an Autosys server,with one or more clients,on single machine or on multiple machines

• An instance uses its own Event Server and Event Processor by operating independently of all other Autosys instances

• Multiple instances can run and schedule jobs on the same machine without affecting other instances on that machine.

Useful resources links

- https://www.broadcom.com/products/software/automation/autosys#:~:text=AutoSys%20Workload%20Automation%20enhances%20visibility,consistent%20and%20reliable%20service%20delivery.

- https://www.youtube.com/watch?v=NHhNE-ux4yY

- https://autosys-tutorial-beginner.blogspot.com/2015/09/chapter-1-introduction.html

- https://www.tracedynamics.com/autosys/

Thank You 🙏