All the benefits of
vendor supported software
with complete JCL compatibility

REPLACING YOUR MELLON MODS WITH THRUPUT MANAGER ®

ThruPut Manager is a sophisticated Batch Management product for JES2, with a full set of optional components to meet the needs of the modern Data Center. One of these components, TM/Job Binding Services™ (TM/JBS), provides all the functionality (and more) provided by the Mellon Bank Shared Spool mods for controlling the selection of jobs and providing operators with information about those jobs. In addition, it accepts standard Mellon JECL syntax in order to ease the transition.

Specifically, TM/JBS supports the following Mellon Mod functions:

☐ **Job pre-, post- and co-requisites** (/*BEFORE, /*AFTER and /*WITH)

☐ **Resource Routing** (/*ROUTE XEQ)

☐ **Resource Serialization** (/*CNTL)

Job Pre-, Post-, and Co-Requisites

/*BEFORE jobname, /*AFTER jobname and /*WITH jobname are supported directly as part of TM/JBS's *Job Chaining Services* function. The support is extended from the Mellon implementation to add the concept of a batch to which each referenced job belongs, in order to prevent accidental release by someone else's job.

Resource Routing

/*ROUTE XEQ resource-name, /*ROUTE XEQ HERE and /*ROUTE XEQ CPUn are supported as part of TM/JBS's *Job Binding Services* function. They are internally converted to the equivalent Binding statement, /*JBS BIND agent-name.

Resources, as they are defined in the Mellon implementation, are known as Permanent Binding Agents. These agents are created through a DEFINE command, and may be attached and detached by the JBS ACTIVATE and JBS DEACTIVATE operator commands or by a JECL or DD SUBSYS statement in a job. Job Binding Services also supports the concept of resources associated with the presence of a particular job, which are known as Job-related Binding Agents.

Information about jobs under the control of Job Binding Services can be displayed using the JBS DISPLAY JOB, JBS DISPLAY HELD and JBS DISPLAY AGENT(S) operator commands or ThruPut Manager's User Display Facility.

ThruPut Manager offers much more powerful resource routing capability through use of the full range of Job Binding Services functions. In particular, these functions include:

☐ **Automatic activation and deactivation of Binding Agents:** Agents may be automatically activated and deactivated at the beginning of a job, the beginning of a step, the end of a job, whenever a particular message is issued by a specified address space, or whenever the operator enters an Activate

ThruPut **Manager** ®*6*

ON TIME
*Automation
Designed
for Batch*

or Deactivate command. Agents associated with a particular server process, such as an IMS region, are automatically deactivated when the region ends if not explicitly deactivated before.

☐ **Dynamic Job Routing:** A batch job may be automatically routed to wherever a particular binding agent is active. The association between the batch job and the binding agent can be automatically identified and dynamically added to a job by the rules you express in ThruPut Manager's Job Action Language (JAL). Also, a 'bind' can be specified through a /*JBS BIND statement in the job's JCL.

☐ **Cross-Node Routing:** A binding agent may be given the XMIT attribute. If so, when the agent is activated a destination node-name may be specified. Any job bound to that agent will be transmitted to that node and, if ThruPut Manager is also installed there, it will then be re-analyzed.

These functions give rise to such benefits as, for example:

☐ automatic recognition of a program product, so that the job can be bound to the system(s) where the software is licensed (or a backup system in an emergency situation) *with no input from the submittor.* Substantial savings are possible by licensing program products for a single system, where practical.

☐ system balancing can be aided by the ability to route workload to all nodes in the shop. The operator can associate an XMIT agent with a different node when required and the workload will automatically follow.

☐ use of Job-related Binding Agents to associate a job that requires a service (a client) with a job that provides the service (a server), with no human intervention; for example, a job that requires access to a particular DB2 or IMS region can be bound automatically to that region and will only run on the same system and at the same time.

Resource Serialization

/*CNTL resource-name EXC/SHR statements are supported as part of TM/JBS's *Job Limiting Services* function. They are internally converted to the equivalent Limiting statement, /*JLS ENQ control-agent-name. In addition to the standard Mellon capability, ThruPut Manager also provides a DRAIN keyword for exclusive requests, which takes effect when the job is selected but cannot run because the resource is already in use by a job in shared mode. From that point it prevents any further jobs from getting shared access until the exclusive request is satisfied. The equivalent to a JLS ENQ can also be added dynamically through the Job Action Language.

In addition to resource serialization, Job Limiting Services offers a powerful mechanism to control concurrent access to any data center resource. A limit is established, giving a maximum number of accesses to the resource, and each participating job specifies a weight, or number of accesses it requires. Limits are usually identified and added to a job with no specification from the submittor, as part of the JAL rules defined by the installation. This capability allows a data center to control, for example:

☐ the number of DB2 threads allowed to be stolen by non-production batch,

☐ the number of concurrent initiators in use by any department, and

☐ the number of tape drives in use in total or subsetted by, for example, production vs. non-production, or department.