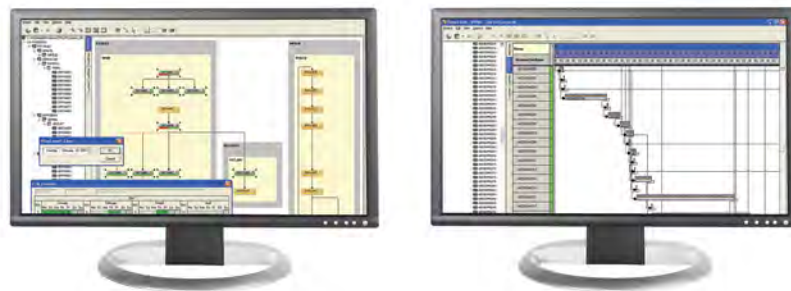


# VISUAL | job for Control-M



**APS | ENTERprise**

Get the Most Out of IT.

Control-M, by BMC, is at the center of automation and batch processing in the Enterprise IT environment. Companies rely on Control-M to proficiently and accurately automate mission-critical business processes within an ever tightening batch window. As business demands increase, so do the requirements on batch production, continually expanding the Control-M scheduling flow and making it more complex to understand, maintain and ultimately manage.

It is no longer sufficient to just “maintain the schedule”. Managers and production control staff must be service oriented in an effort to meet SLAs, communicate effectively with the business and technical departments, document the schedule and optimize the scheduling resources.

VISUALjob for Control-M was designed specifically to address these challenges. VISUALjob is the latest generation solution for Control-M for Distributed Systems and z/OS, providing unique insight. You can now bring your entire production environment into one intuitive graphical solution to gain instant control of your business-critical applications. The advantages of VISUALjob are not solely based on its robust feature set, but derived from the integration of these features with one another.

## Through one common graphical interface you can achieve:

- Enhanced Visualization and Documentation
- Job Flow Analysis
- Forecasting
- Cross Reference Reporting
- Dependency / Path Analysis
- Statistical Reporting
- Workload Analysis
- Workload Simulation
- Understanding and Simulation of the Critical Path
- Design and Maintenance of z/OS Job Flows

The integrated functionality provided by VISUALjob is unmatched, resulting in productivity increases combined with a quality improvement and effective usage of resources. The benefits acquired with VISUALjob are immediate and a quick return on investment will prove VISUALjob to be a strong IT asset.

**BE PROACTIVE, NOT REACTIVE!**

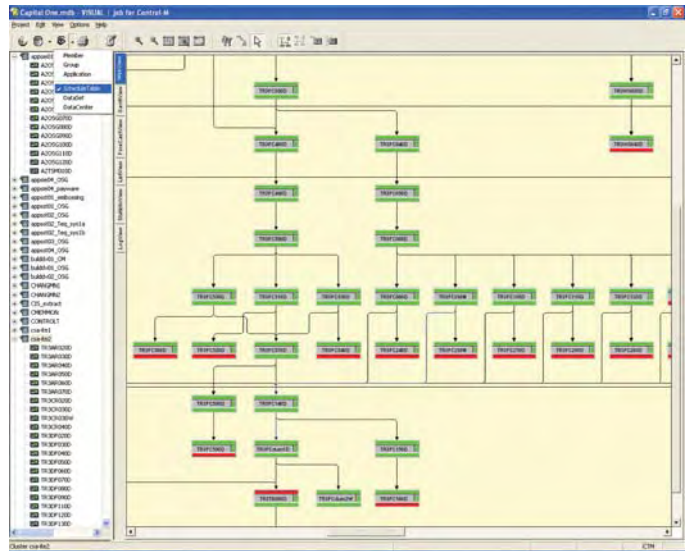
## Intuitive Graphical Interface

VISUALjob provides managers, production staff, applications personnel and end-users with a clear and concise visualization of small or large Control-M job flows with the click of a mouse. Complex relationships between processes are presented in an easily understandable, interactive flowchart; not only reducing the time it takes to understand the existing environment but also pinpointing potential problems and avoiding schedule interruptions.

All condition types, including post processing conditions, are displayed in color providing a complete representation of the job flow, allowing you to fully understand the relationships between jobs.

Creation of graphics, prints and/or PDFs of the jobs flows facilitate accurate communications between interrelated departments and better documents the business processes that Control-M supports.

The focus of your flowcharts can be as narrow as individual jobs or across datacenters and platforms. Powerful filtering criteria and options can be used to customize and narrow the focus of information contained in the interface.



VISUALjob Graphical Interface



VISUALjob Forecast

## Forecast

VISUALjob provides the scope and flexibility to not only accurately forecast when processes will be scheduled for execution, but also identify under what circumstances scheduled and non-scheduled jobs will or will not run under. Displaying the different condition types (OK, NOTOK, CONDITION CODE, etc.) represent a complete picture of the dependency structure within the forecast. This can identify potential conflicts so they can be resolved before they negatively affect the production environment.

Forecasts can be generated within a year calendar, flowchart, Gantt chart and/or a spreadsheet. These can then be printed, exported to MS Excel or exported to several graphical formats.

The scope of a generated forecast, as related to time and/or jobs can be as narrow or broad as necessary to meet analysis objectives. This scope can be expanded or narrowed on-the-fly.

A major advantage to VISUALjob's Forecast is its integration with its other functions. For example, a forecast can be performed on the output of a path search or cross reference report.

## Cross Reference and Reporting

Information that previously took hours to produce, or was simply unattainable because of complex relationships, can be generated in seconds without requiring third party products, individual scripting, proprietary skills or production resources. Users focus on the reporting objective, as opposed to the process of achieving that objective. Virtually any combination of fields within Control-M (z/OS and/or DS) can be used as search and reporting criteria.

The output of VISUALjob reports can be in a user-designed spreadsheet and/or in a graphical flowchart. Textual output can be exported to MS Excel and the graphical output can be exported to several image formats for documentation, posting on an inter/intranet site or delivery to a requestor.

Templates for the report criteria and report layouts can be created and shared, facilitating the quick re-generation of reports referencing the then current data.

## Statistical Reporting

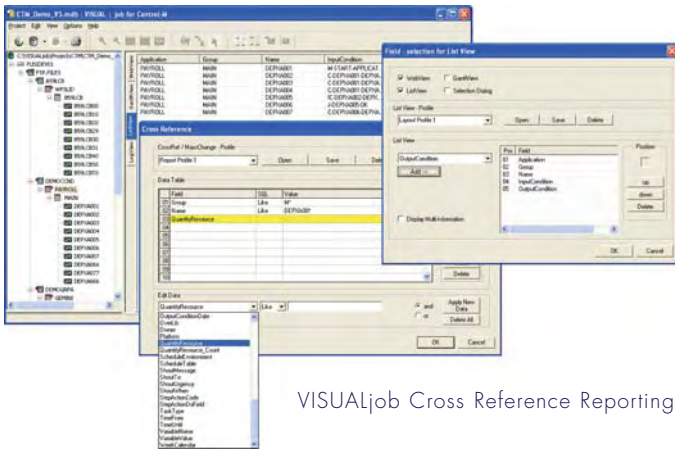
Free form reports can easily be generated utilizing statistics collected from past Control-M batch executions. Robust filtering criteria can be used to narrow the focus of reports based upon criteria such as dates, times, job, node id, job status, completion status, day of week, and more.

VISUALjob's statistical reporting answers questions such as "What were the average run times of specific jobs for a specific period of time?" or "What jobs ended in NOTOK the previous day?".

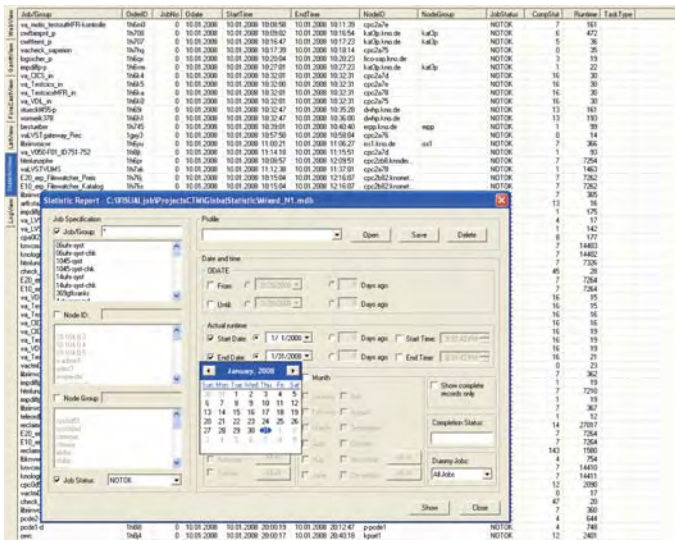
All statistical reports can be exported to MS Excel for delivery via email or subsequent processing and analysis.

## Path Analysis

It is often critical to identify the path of jobs that exist within a dependency structure. VISUALjob's Search Path can be used to identify, and optionally isolate, the path of jobs between two given points, the path branching from a start job or the path the leads into an end job.



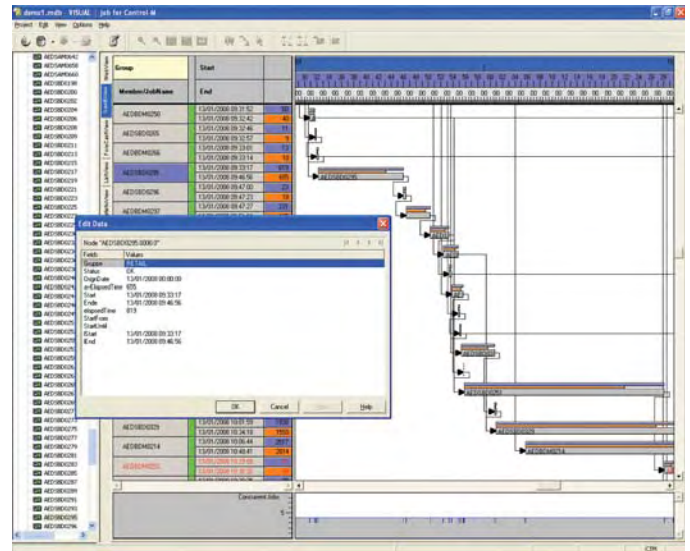
VISUALjob Cross Reference Reporting



VISUALjob Statistical Reporting

## Workload Analysis

VISUALjob enables you to visualize past batch executions in a Gantt chart, based on the actual historical runtime information collected in the statistical database. This provides an excellent graphical overview of how processes have performed in the past and as compared to their average performances. Histograms showing the number of jobs running in parallel complete the production picture, which is otherwise difficult, if not impossible, to gain. Bottle-necks and other potential problem areas can be identified and corrective actions can be made in a productive way.



VISUALjob Workload Analysis

## Workload Simulation and Critical Path Simulation

When there is no way to accurately simulate the effect of an added load to a job flow or the longer/shorter running of jobs within a flow, service levels are hard to define. As a result service levels are defined by business partners requesting the work and/or best estimates by production personnel.

The VISUALjob Workload Simulation utilizes historical statistics to graphically simulate the effect of changes in the job/dependency structure of a job flow and identify the critical path of jobs as it relates to time. Fluctuations in run times can be interactively manipulated to identify how the critical path changes under certain conditions. Different batch production cycles can be emulated when simulating (e.g. daily cycle, monthly cycle, etc.).

The result is accurate definitions of SLAs and cost savings in higher percentages of meeting and exceeding SLAs.

## Designing and Maintaining Scheduling Definitions

Scheduling design and modifications can now be performed through an interactive GUI using simple Windows controls (drag, drop, click, etc.), as opposed to several text based panels. All Control-M for z/OS parameters are supported and all field names used in the GUI are the same as in the Control-M IOA interface, so users will be inherently familiar with the process.

Schedules are created based on user-defined templates for speed, standardization and reduction of scheduling errors. Validation is performed at the time of creation / modification. An historical audit trail is created for all modifications documenting all changes and who they were made by. (This feature is available for Control-M for z/OS only)

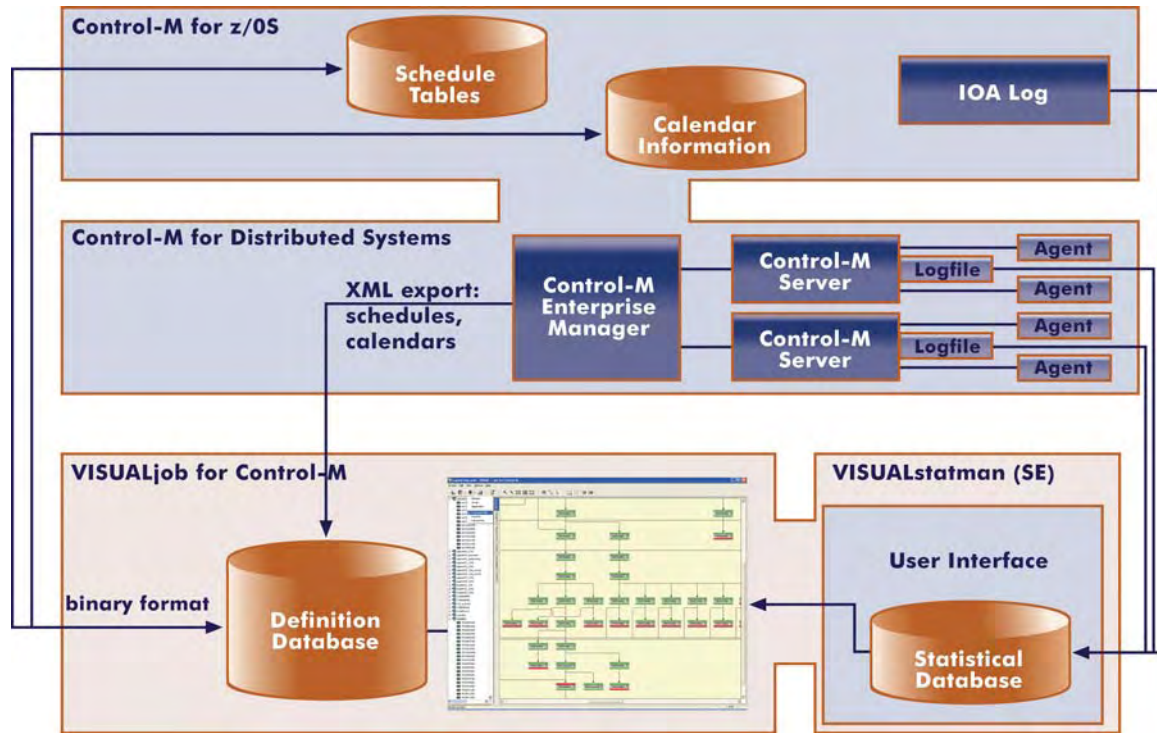
## Mass Change

Performing mass changes within Control-M can be a daunting task involving extensive manual cross referencing. The VISUALjob mass change facility allows one or many mass changes to multiple scheduling parameters based on filtering criteria in a single step, resulting in huge time savings while ensuring accurate, validated results. (This feature is available for Control-M for z/OS only)

## Architecture

VISUALjob can be installed in a single-user architecture or a multi-user architecture for a more collaborative environment. Scheduling, calendar and statistical information is extracted from the Control-M environment and imported into VISUALjob in an automated process.

Optimization of the schedule flow and production resources is a constant objective. With this in mind, the architecture of VISUAL job allows all functionality to be accomplished without a negative impact on production.



VISUALjob Architecture

Security rights can be assigned within VISUALjob in a multi-user environment. With this facility, users may or may not be given access to certain key function areas of the product. This allows VISUALjob to be available for different users, with different areas of focus. Possible user profiles are, for example; information gathering, job design, workload planning and proactive job management.

**Benefits:**

- ☑ Better understanding of the entire job flow
- ☑ Increased documentation capabilities
- ☑ Clear understanding of past job executions through reporting and graphics
- ☑ Better communication between people and departments
- ☑ Proactive business approach to managing the batch schedule
- ☑ Critical errors and bottlenecks are easily identified and prevented
- ☑ Enhanced quality assurance
- ☑ Sarbanes-Oxley / ITIL / ISO regulatory compliance
- ☑ Common information system for production and non-production specialists
- ☑ Accurate management of future job runs through workload simulation and critical path simulation, replacing professional "guesstimates"
- ☑ Increased productivity in managing batch services
- ☑ Fast and secure change and mass change capabilities for Control-M for z/OS

**Return on Investment:**

- ☑ Time savings in creating and updating scheduling documentation
- ☑ Cost savings through better understanding of the existing job flows
- ☑ Avoiding costs (staff and CPU) through early detection and resolution of problem areas
- ☑ Documentation, development, maintenance and quality assurance tasks require NO production resources
- ☑ Reduced CPU costs with a batch schedule running at optimal performance
- ☑ Costs associated with training are reduced by lowering the learning curve
- ☑ Higher percentage of meeting SLAs
- ☑ Lower total scheduling costs

APS|ENTERprise offers a free 30 day evaluation of VISUALjob for Control-M. During your evaluation period you will receive full support for the implementation and operation of VISUALjob.

Please contact us for further information or to schedule an on or off site presentation.

For your local APS|ENTERprise partner please visit: [www.aps-enterprise.com](http://www.aps-enterprise.com).



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