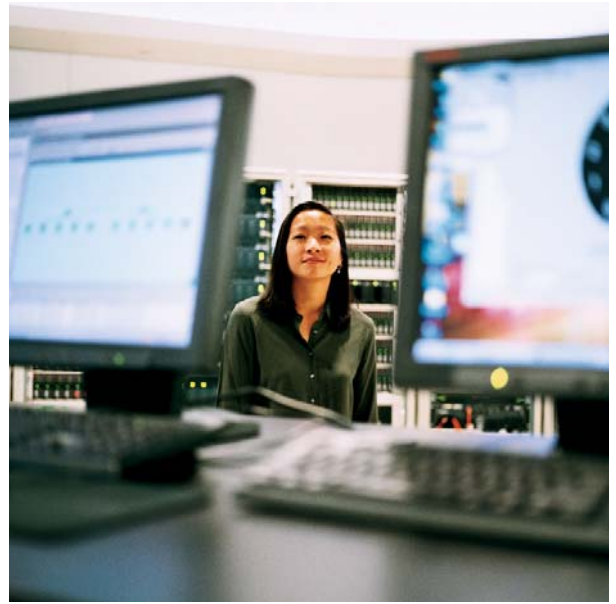


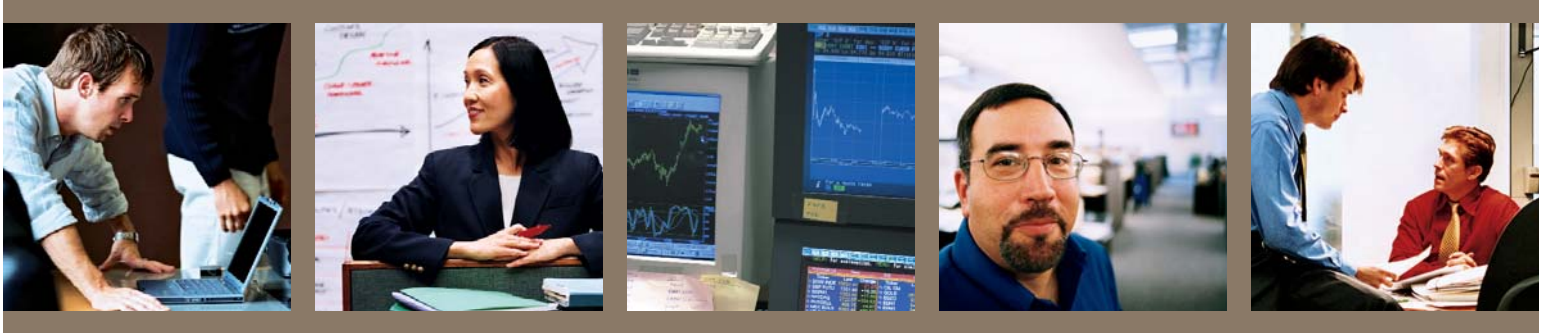
# HP TCM software



A host- and workstation-based tool for system modeling, the HP TCM software provides capacity planners a reliable way to determine future resource needs and response times. Using the popular spreadsheet software Microsoft Excel, TCM software lets you focus on the *what* rather than the *how* of capacity-planning tasks by minimizing the calculations typically involved.



TCM software is flexible. From transaction rates and growth estimates, TCM software predicts the number of processors and disk devices necessary to maintain good response times.



#### Features at a glance

- Familiar spreadsheet environment for capacity planning
- Calculation of transaction workload apportionment
- Trends forecasting based on historical data
- Projection of capacity needs and response times
- Proven accuracy for capacity planners
- Powerful and easy-to-use user interface

TCM software simplifies exploring growth scenarios and server configurations. With your input, TCM software can deliver alternative solutions for your toughest capacity-management challenges. Those alternatives can be displayed and printed as spreadsheets or as presentation-quality charts.

#### Familiar spreadsheet environment for capacity planning

TCM software uses the powerful Microsoft Excel spreadsheet software on PC workstations, providing the formulas and macros you need to plan efficiently for future growth.

TCM software simplifies the process of defining and modeling transaction workloads. You select all tasks from a menu, so there's no need to learn a command syntax. Online help guides you whenever you have a question.

The TCM methodology is so efficient you can readily adopt it for modeling growth and performance. Standard models, tables, and graphs ensure that your group's work is consistent from month to month and from person to person.

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## Calculation of transaction workload apportionment

The process of transaction workload apportionment is central to capacity planning on HP NonStop servers. TCM software transforms performance data collected by HP Measure software into transaction-oriented information. It does this by providing a template that assigns transactions to the measured entities (such as processor and disk utilization) and letting you generate a baseline model. You can easily customize this template for specific needs.

## Trends forecasting based on historical data

The TCM history file allows you to apply the model to a series of collected data samples and store the calculated results. The information in this file is crucial to validating your model and can be used to perform throughput trending through linear regression.

## Projection of capacity needs and response times

Using your baseline model, you can quickly perform what-if operations to analyze capacity requirements and to predict performance results and when your server will reach capacity. TCM software estimates expected host response times and throughputs for online transaction processing (OLTP), batch, and mixed environments.

TCM software is flexible. From transaction rates and growth estimates, TCM software predicts the number of processors and disk devices necessary to maintain good response times. From server configuration plans, TCM software predicts response times for transactions over time.

For professional-quality presentations, TCM software can display or print these predictions in full-color graphs. Transaction rates are plotted in one color and response times in another, so you can clearly see their relationship.

For professional-quality presentations, TCM software can display or print response-time predictions in full-color graphs. Transaction rates are plotted in one color and response times in another, so you can clearly see their relationship.

### Proven accuracy for capacity planners

Comparing TCM predictions with measured data from customer benchmarks has proved the reliability of TCM calculations for transaction workloads.

The efficiency and accuracy of TCM software frees you to focus on evaluating alternatives instead of capturing and manipulating data. TCM software captures only the data necessary for capacity planning, saving you time and reducing your costs.

### Powerful and easy-to-use user interface

The customizable TCM user interface allows the user to rapidly predict processor and disk requirements and response times based upon various transaction volumes. The TCM user interface includes the following features (see figure 1):

- No gridlines
- Color code to distinguish the protected cells (brown) and user-modifiable cells (yellow)
- Drop-down lists and TCM toolbar
- Separate worksheets for distinct TCM screens that make navigation simpler

- Highlighting fields modified by the user in a noticeable font (bold and blue)
- A user authorization-level button on the toolbar to indicate the current user level and to alter the authorization level
- Application Control menu disabled for all but the “super user”
- Eight scenarios in the Planning Timeline Sheet
- User preference sheet used to customize the appearance of the sheets

In addition, a method called *smart cell update* is provided in the Detail Plan Sheet. If the user changes a formula yielding the desired value in the Actual CPU type, TCM software changes the cell entry into the appropriate formula yielding the desired value, and also scales as necessary depending on the Plan CPU type (see figure 2).

The customizable user interface also includes a Disk Factors sheet (see figure 3).

TCM software allows users to draw timeline charts so that they can see a graphical view of the present and future scenarios. The timeline chart (see figure 4) shows the curves of transactions per second and the average response time for a particular type of transaction.

# HP TCM software

1. User authorization-level button
2. Drop-down list
3. Modified cell
4. User-modifiable area
5. Protected cells
6. If the Actual CPU option is selected here, the formula in the modified cell is changed accordingly.
7. When a cell is modified, the corresponding formula is updated in the cell instead of the value getting hard coded. This is called *smart cell update*.

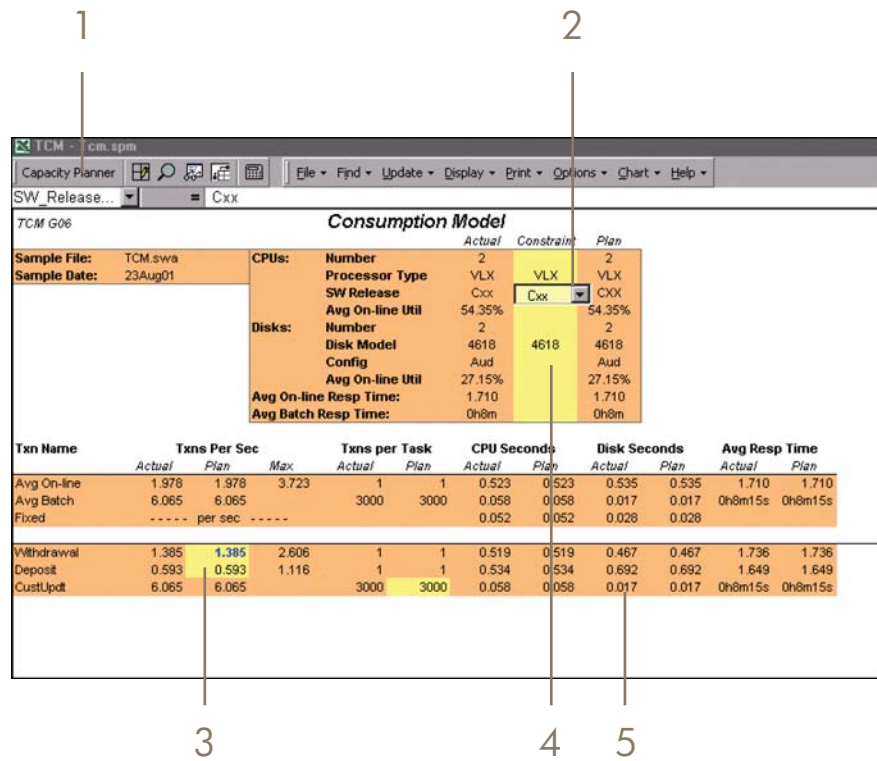


Figure 1. Easily customizable user interface.

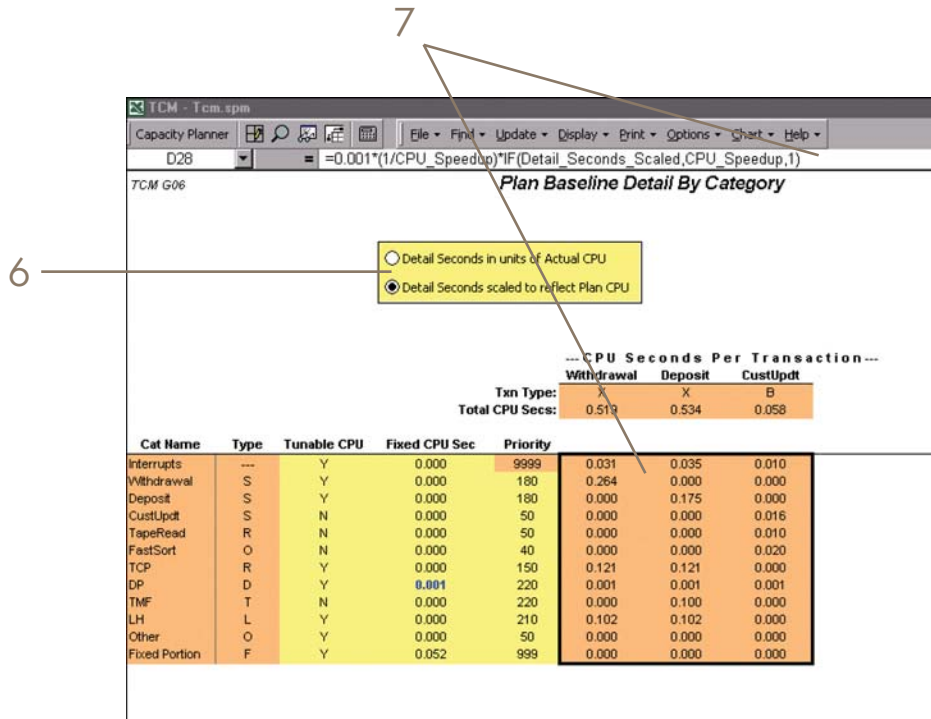
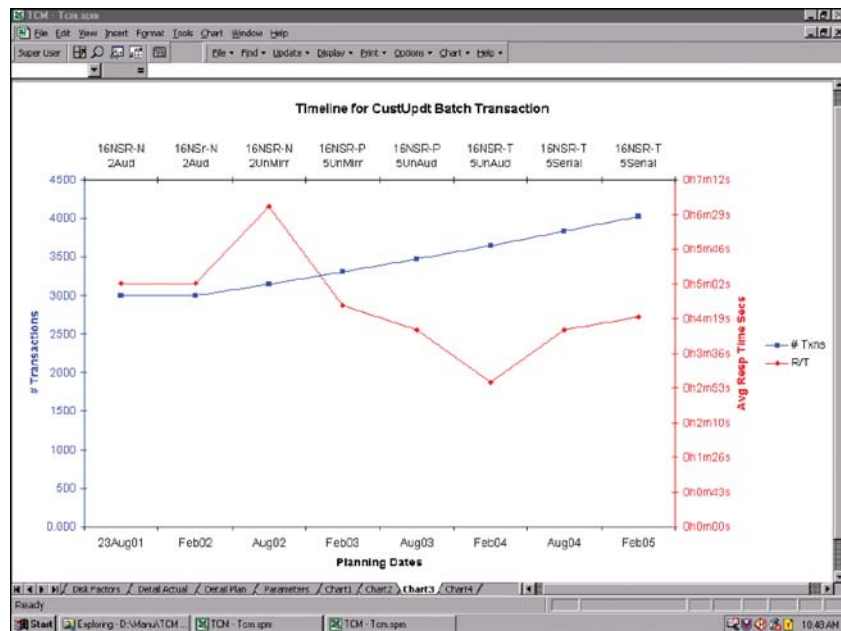


Figure 2. Using smart cell update, the formula is modified when cell values change.

The screenshot shows the HP TCM software interface. At the top, there is a menu bar with 'Capacity Planner' and a search icon. Below the menu bar, the text 'C6' and '4160' is visible. The main window title is 'TCM G06' and the section is 'Disk Factors'. A table lists various disk models with their rotational speeds and controllers.

Disk Model Number	Rotational Speed (rpm)	Controller
4160	3600	Ext
4170	3600	Ext
4230	3600	MFC
4240	3600	MFC
4250	5400	MFC
4255	5400	MFC
4260	7200	MFC
4265	7200	MFC
4330	7200	Ext
4500	3600	Ext
4510	5400	Ext
4517s	5400	Ext
4560	5400	Ext
4570	7200	Ext
4580	7200	Ext
4590	7200	Ext
4604	7200	Snet
4608	7200	Snet
4618	7200	Snet

Figure 3. The user may easily modify existing disk factors and add new ones.



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**Ordering information**

<b>Product ID</b>	<b>Description</b>
9173	HP TCM, host component
9174	HP TCM, PC component

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**Specifications****System requirements**

**Hardware** Any HP NonStop server  
PC-compatible Pentium I or higher; detailed requirements as per Microsoft's stated hardware requirements for Windows and Microsoft Excel products

**Software**

Host environment HP NonStop Kernel operating system, any supported software release, C30.09 or later  
T6042D40 Meastcm

PC environment Microsoft Windows 95, Microsoft Windows NT 3.51 or 4.0, Microsoft Windows 2000, or Microsoft Windows XP, and U.S. versions of Microsoft Excel for Windows 2000 (a component of Microsoft Office 2000, also called Excel Version 9.0) or Microsoft Excel for Windows XP (a component of Microsoft Office XP, also called Excel Version 10.0)

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