

## How Much Will Active/Active Cost Me?

October 2006

How much will an active/active system cost me? What will be its total cost of ownership (TCO)?

The proper calculation of TCO for a system can be a daunting task. There are, however, services available to help. One such service is VirtualADVISOR TROM from The Standish Group (<http://www.standishgroup.com>). TROM stands for Total cost of ownership Rough Order of Magnitude. It is a lot words to describe a lightweight cousin of the larger TCO assessment models, but TROM is quicker, less expensive, and less arduous to use. Basically, with TROM, Standish does all the heavy lifting and provides the client with a concise and comprehensive report that can be shared with management to make strategic and tactical decisions.

The TROM service uses a set of Standish VirtualADVISOR tools, which accept from the client a wide range of input parameters concerning the costs of the current system and the proposed system. The VirtualADVISOR tools are then used to calculate various TCO and ROI parameters.

The process begins with the VirtualADVISOR client working with a Standish STAR (STandish Advisor). This experienced field operative guides the client through the process of entering the required input data into a VirtualADVISOR worksheet.

REPORT TITLE: Scenario 1.4P - 2P

DESCRIBE REQUEST: Client is at end of lease period with his S89004 and wants to upgrade to the new 2 Proc. [required]

REQUEST FOR:
 

- TCO [Total Cost of Ownership]
- ROI [Return on Investment]
- Project Information [i.e. development, migration]
- Comprehensive [selects all types]
- Report Recipient [contact information - ONLY required if report is for a third party]

Number of Years for ROI Calculation: 3 [required - will default to "3 years" if not entered]

ITEM Name	TYPE Select One	CURRENT		PROPOSED		PERIOD Select One
		Qty	Amount/Unit	Qty	Amount/Unit	
Hardware Cost	Cost	1.00	182,500.00	1.00	148,000.00	Yearly
Software Cost	Cost	1.00	55,000	1.00	8,500.00	Yearly
Manpower Cost	Cost	1.00	72,500.00	1.00	72,500.00	Yearly
Maintenance Cost	Cost	1.00	50,500.00	1.00	45,000.00	Yearly
Other Basic Cost	Cost	1.00	77,500.00	1.00	77,500.00	Yearly
Software Infrastructure Cost	Cost	1.00	109,000.00	1.00	44,500.00	Yearly
DB & System Administration Cost	Cost	1.00	33,500.00	1.00	33,500.00	Yearly
Application Maintenance	Cost	1.00	57,500.00	1.00	57,500.00	Yearly
Other Application Cost	Cost	1.00	18,500.00	1.00	18,500.00	Yearly
Migration Cost	Cost	0.00	0.00	1.00	100,000	One Time

### VirtualADVISOR ROI Input Data

**REPORT TITLE:** Scenario 1 4P - 2P

**DESCRIBE REQUEST:** Client is at end of lease period with his S88004 and wants to upgrade to the new 2 Proc. Itanium platform [required]

By checking a category below, you will reveal that section's tab at the top of this form. To remove the tab, uncheck the box.

**REQUEST FOR:**

- TCO [Total Cost of Ownership]
- ROI [Return on Investment]
- Report Recipient [contact information - ONLY required if report is for a third party]
- Project Information [i.e. development, migration]
- Comprehensive [selects all types]

**Please Select One:** [required]  System TCO  Consolidation TCO  Migration TCO ("Many-2-Many")

**Application:** ATM

**Server Type:** Dedicated

**Application Type:**  TPS  Batch  Query

Transaction Rates: Hrs/Yr@Peak: 2000 TPS@Peak: 14.25 TPS@Off-Peak: 1.00

Choose ALL Systems -OR-  Enter # of Systems: 2

Systems	Database	Uses TPM? [check if yes]
1 HP NonStop Server	NonStop SQL	<input checked="" type="checkbox"/>
2 HP Integrity NonStop	NonStop SQL	<input checked="" type="checkbox"/>

### VirtualADVISOR TCO Input Data

The input data covers the following costs for both the current system and the proposed system:

- hardware
- software licenses
- manpower
- hardware and software maintenance
- facilities
- software infrastructure
- database and system administration
- application maintenance
- migration
- other (trade-ins, credits, and so forth)

The input tool allows any miscellaneous category to be defined and cost factors entered for that category. Various revenue categories may also be defined and entered.

Information about the applications is also entered and includes such items as the type of application (transaction, batch, query), transaction rates, both the current and proposed systems, and the current and proposed databases.

This input data is then passed to a Standish inhouse specialist. Using a sophisticated cost and downtime database called CENTS (Comparative Economic Normalization Technology System) and other tools, the expected range of each cost element is estimated; and optimum solutions are created.

The same process is used for projects. Standish uses a process that it describes as case-based reasoning technology driven by the CHAOS database to measure and profile the input data. The CHAOS database contains over 100 pertinent attributes from over 50,000 cases submitted by over 5,000 project managers through surveys, user interviews, vendor interviews, and focus workshops.

At this point, ROI and TCO tools are used to calculate a variety of cost and return-on-investment parameters. The results include for a specified time period:

- cost of implementing and operating the system
- capitalized savings
- operational savings
- cumulative gain (savings – cost)
- return on investment
- payback period

The inhouse specialist then prepares a report explaining these results and defining the best strategy to maximize ROI. The report is passed to the client’s STAR, who works with the client to review the outcomes and to make recommendations for paths to pursue.

Results for Year 1 of Scenario 1 4P - 2P <span style="float: right;">[MODIFY This Year]</span>			
<b>Net Gain: 50,500.00</b>		<b>Cumulative Gain: 50,500.00</b>	
<b>Cumulative ROI = 50.5%</b>			
Capitalized Items	Cost Items	Savings Items	Revenue Items
NONE	Migration Costs	Hardware Software Maintenance Software Infrastructure	NONE
Capitalized Total: <b>0.00</b>	Costs Total: <b>100,000.00</b>	Savings Total: <b>150,500.00</b>	Revenue Total: <b>0.00</b>
Results for Year 2 of Scenario 1 4P - 2P <span style="float: right;">[MODIFY This Year]</span>			
<b>Net Gain: 150,500.00</b>		<b>Cumulative Gain: 201,000.00</b>	
<b>Cumulative ROI = 201.0%</b>			
Capitalized Items	Cost Items	Savings Items	Revenue Items
NONE	NONE	Software Hardware Maintenance Software Infrastructure	NONE
Capitalized Total: <b>0.00</b>	Costs Total: <b>0.00</b>	Savings Total: <b>150,500.00</b>	Revenue Total: <b>0.00</b>
Results for Year 3 of Scenario 1 4P - 2P <span style="float: right;">[MODIFY This Year]</span>			
<b>Net Gain: 150,500.00</b>		<b>Cumulative Gain: 351,500.00</b>	
<b>Cumulative ROI = 351.5%</b>			
Capitalized Items	Cost Items	Savings Items	Revenue Items
NONE	NONE	Hardware Software Maintenance Software Infrastructure	NONE
Capitalized Total: <b>0.00</b>	Costs Total: <b>0.00</b>	Savings Total: <b>150,500.00</b>	Revenue Total: <b>0.00</b>
<b>Final ROI: 351.5%</b>		<b>Total Gain: 351,500.00</b>	
		<b>Payback Period (Months): 8</b>	

**A Page From a TROM Report**

The report is provided in PDF format and is organized as follows:

<b>Introduction</b>	The Introduction is a brief paragraph on the process and how the report was generated
<b>Data and Assumptions</b>	The Data and Assumptions section describes the platforms, activities, and assumptions that have gone into the making of the report. TCO, ROI, migrations, and data sources are all identified.
<b>Project Risk</b>	The Project Risk section provides insight into migration projects and emphasizes some of the issues that should be addressed specific to a project of this nature.
<b>Savings</b>	This is the TCO section. Each cost is explained, and potential savings are plotted in tabular or graphical form.
<b>ROI</b>	The ROI section pulls the entire document together. It provides an ROI analysis of the migration/consolidation strategy. It discusses the capitalized and operational savings. It defines the best strategy to achieve the optimum ROI.
<b>Recommendations</b>	Recommendations are made based on the findings of the study, and justification is provided to either continue or abandon the project.

VirtualADVISOR requires neither training nor any installation of software. The client's interface is strictly through his STAR.

The final output of the TROM service, whether it be related to a set of applications, a new project, or a migration project, will be a formal report that the client can use to determine from which alternatives he can choose based on real-life cases free of all vendor hype.

Though not related to TCO and ROI, another major part of the VirtualADVISOR service is the assessment of risk associated with implementing a project. This is supported by the extensive case study attributes found in the CHAOS database.