

# How to Get Budget for the Tools You Need

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## Meet the Speaker - Steve Lemme



Steve Lemme is a Director of Product Management at CA for [CA Database Management](#) product solutions. Mr. Lemme joined CA upon its acquisition of Platinum Technology International, Inc. where he was responsible for product management and marketing. Previously, he held positions in product management, marketing, research and development, IT data center operations and support while at Allied Signal, Apple Computer, GTE and Motorola.

Mr. Lemme is author of the book "[Implementing and Managing Oracle Databases](#)" and is an accomplished systems architect and Oracle Master DBA, with more than 15 years experience in distributed database architecture and internet computing. He served 6 years as a Director on the International Oracle Users Group board, Vice President of the Arizona Oracle Users Group.

Steve is a blogger and regular speaker at IT industry conferences worldwide and columnist contributor for [Database Trends and Applications Magazine](#). Steve is the author of the [CA Oracle Data Dictionary Poster](#)

Steve's background includes: Sarbanes-Oxley 404 and Regulatory Compliance as it applies to IT. CobiT controls for databases and IT risk mitigation. Six Sigma, ISO and SEI project expertise. System Infrastructure Architecture Design for mission critical 24x7 availability. Expertise with multi-tiered Application Performance Management. Best Practices for RDBMS consolidation and multi-database management. Professional IT trainer. Oracle License Management. IT Outsourcing. Data Center Management. Disaster Preparedness

# Abstract

- With the ever increasing size and complexity of the latest Oracle technology releases, it is extremely difficult to manage a database or performance today without any tools. While Oracle installs them in the latest database releases, not much is free. With over 23 chargeable tool options by Oracle alone, obtaining budget for any tools unfortunately it is not as easy as just asking.
- Without a proper business case, management won't even consider, and when you have tried, you have been told "No" so many times you have given up asking. Don't get frustrated; learn a few easy steps you can use to overcome your challenge.
- This session is for those individuals that have a business need and want to understand how to best influence their management to get the budget they need to perform their job and have a better quality of life

# Covered In This Quick Tip Session

- Requirements assessment
- Environment
- Time study
- Cost determination
- Industry guidelines
- Cost justification, ROI
- Business sponsor
- Business case

# Business Initiative Preparedness

- Current methods
  - As databases grow, work accomplished within a 24 hour (day) period
  - Current problems
  - Maintenance routinely performed
  - Work for all RDBMS's accomplished
  - Work reusability, best practices
- One year, future 3-5 year planning
  - New application deployment
    - New requirements
    - Composite SOA applications
  - Consolidation and cost reduction
    - More databases on larger servers
  - ITIL, CobiT, Regulatory Compliance

# Environment

- How many databases and database vendors, release numbers
  - Oracle, SQL Server, Sybase, DB2
- Host machine environment and operating systems and release number
  - 64-bit, are 32-bit libraries available
  - HP - PA-RISC or IA-64 or mixed
  - Any databases on clustered systems
    - ServiceGuard HACMP, Veritas, Microsoft, Oracle RAC
- What applications have a a reliance on databases for business
  - SAP, Oracle Peoplesoft, Siebel, in-house?
- What utilities or tools currently owned
  - What they support
  - How are they licensed, priced, and maintenance cost?
  - Education and training

# Time Study and Review

- Activity, Task, and Trouble-tickets
  - Day
  - Month
  - End of Month and End of Year
- Reactive
  - Employee time determining issues not database related
    - Average time to determine
  - Employee time determining issues database related
    - Average time to determine
  - Employee time fixing problems found as result of a database issue
    - Average time for problem resolution
  - Escalation meetings
- Proactive
  - Employee time checking databases
  - Employee time performing database maintenance
    - If a need to delay, what is estimation of time to perform
  - Planning and review meetings

# Current Labor Cost Review

- Overall resources used in problem resolution and work execution
  - Yourself
    - Average work day, work week estimate in hours
      - Estimation of hours of work unaccomplished accumulating
      - Estimated cost of time for tasks completed and pending
        - Fully burden cost - \$250K
  - Team members involvement
    - Average work day, work week estimate in hours
      - Estimation of hours of work unaccomplished accumulating
      - Estimated cost of time for tasks completed and pending
        - Fully burden cost - \$250K
- Is another person projected as needed?
  - Full time
  - Contractor
  - Outsourcer

# Risk, Impact, Cost

- Average cost of unplanned downtime per hour
- Average cost of planned downtime per hour
- Average hours database planned downtime per year
- Average hours database unplanned downtime per month
- Extra penalties or fines for missed SLAs in dollars
- Average number of databases
- Average percent database growth per year
- Average annual budget for database server or storage upgrades
- How many different scripts/utilities/tools used currently
- Average cost of a in-house DBA or contractor hourly rate
- Average hours per week DBA spends monitoring to identify database problems
- Delays associated with organizational boundaries, application group, politics
- Average DBA analysis time in hours per week it takes to determine cause and correct once problem is identified
- Average hours per week spent writing or altering scripts
- Number of database application users
- Number of database problems/trouble tickets per month
- Average time hours per week business users wait for database problems to be resolved

# Study User Group & Industry Research

- Analysts have reported over 96% have at least 2-3 DB vendors
- DBAs should broaden skills and administer different types of databases
- Each DBA manages on average a terabyte of data
- Without use of distributed management software, the practical limit is between 5 and 10 servers per DBA
- Server and storage management is for other administrators as DBAs focus on administration of databases and leveraging skills and processes across platforms
- Even with database vendor automation, tools and database management practices needed
- Databases may come with management but companies can use third-party tools to help achieve more automation
- One survey determined only 9% of IT organizations using any of the common process methods or standards
- Best practice reference

# Prepare ROI

## Database Performance Management ROI

### Instructions

Enter in the values for your site in yellow. Savings detail will be display to the right in green.

ROI calculations will be displayed in the lower right corner.

Graphs and detail can be viewed on following worksheet page tabs.

Enter Your Site Specific Determinators in Yellow		Avg Savings With Database Perf Mgt Tool	Year 1	Year 2	Year 3	Year 4	
	<b>Today</b>	<i>Monthly cost reduction just by choosing subscription</i>	\$ 1,920				
Your average cost of unplanned downtime per hour	\$ 25,000	Average availability savings per year	\$ 300,000	\$ 396,000	\$ 522,720	\$ 689,990	
Average cost of planned downtime per hour	\$ 500	Savings from reduction in problem resolution	\$ 390,000	\$ 561,600	\$ 808,704	\$ 1,164,534	
Avg hours database planned downtime per year	12	Saving from reduced need for additional staff	\$ 215,475	\$ 359,125	\$ 430,950	\$ 517,140	
Avg hours database unplanned downtime per month	10	Savings from time spent writing scripts/tools	\$ 52,000	\$ 20,800	\$ 137,280	\$ 151,008	
Extra penalties or fines for missed SLAs in dollars	\$ 1	Savings from better performance	\$ 74,800	\$ 76,880	\$ 91,856	\$ 107,827	
Average number of databases	50	Savings from yearly DBA turnover (good economy)	\$ 183,872	\$ 183,872	\$ 183,872	\$ 183,872	
Average percent database growth per year	20%	<b>Average potential savings each year</b>	<b>\$ 1,216,147</b>	<b>\$ 1,598,277</b>	<b>\$ 2,175,382</b>	<b>\$ 2,814,371</b>	
Avg annual budget for database server or storage upgrades in dollars to speed processing	\$ 25,000	<p>For larger graph, see ROI graph tab below</p>					
How many different scripts/utilities/tools used currently	5						
Avg cost of a in-house DBA or contractor hourly rate	\$ 40						
Average hours per week DBA spends monitoring to identify database problems	20						
Avg analysis time in hours per week it takes to determine cause and correct once problem is identified	10						
Avg hours per week spent writing or tweaking scripts	5						
Avg hours per week spent evaluating tools	2						
Number of database application users	500		<b>Average Return On Investment Based On</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
Number of database problems/trouble tickets per month	2		Based on savings, productivity, and downtime savings	\$ 576,147	\$ 1,470,277	\$ 2,047,382	\$ 2,686,371
Average time hours per week business users wait for database problems to be resolved	5		Enter avg tool price purchased with annual maintenance for # of databases entered in C15	640,000	128,000	128,000	128,000

This ROI model based on 1-200 databases. Your savings may vary

Customer Detail	ROI Graph	ROI Detail	Database Work Detail	Downtime Cost Outages	Resource Cost Detail
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# Supporting Justification

- As complexity and database growth increases advanced technology can counter lengthened time to complete work
  - Use cases, example workflow, swim lanes
- Reduced downtime / insurance against downtime
- Increased performance
- Labor savings from manual methods
- Elimination of redundant hardware
- Savings from unused licenses or hardware realized from Capacity Planning
- Headcount savings
- Support / Maintenance / Configuration Management savings
- Consolidates and centralizes management reducing cost, increasing service levels
- Standardized processes increase efficiency with greater control and accountability

# Prepare Proposal

- Develop strawman
  - Define need, purpose, stakeholders
  - Business requirements, priority
    - Refine requirements, estimate in-house development requirements and commercial products
  - Shortcomings of existing practices, risks
  - Cite industry research, best practices
  - Recommendation, alternatives
  - Benefits, cost
  - ROI
- Obtain buy-in
  - Meet with customer, confirm their needs represented
  - Review priority and benefits for business needs, not just your own
  - Current budget year identified, or identified for next budget cycle
- Create final report and present
  - Be prepared for rejection and rework
  - Have a rollout plan and schedule readied

# Further Information

- Online information resources:
  - [www.ioug.org](http://www.ioug.org)
  - [www.oracle.com](http://www.oracle.com)
  - <http://www.oasis-open.org>
  - Whitepaper for this presentation
  - Forrester Research Inc.
    - The DBMS Management Software Market  
[http://ca.com/files/IndustryAnalystReports/the\\_dbms\\_management\\_software.pdf](http://ca.com/files/IndustryAnalystReports/the_dbms_management_software.pdf)
    - IT Operations And Systems Management: The Next Five Years
- Technology you may wish further investigate with your local contact
  - CA is one of the world's largest IT management software providers. CA software unifies and simplifies complex IT environments in a secure way across the enterprise for greater business results. [www.ca.com/eitm](http://www.ca.com/eitm)
  - Download and use in your company at “No Charge” for major database vendors in one web console
    - <https://www.ca.com/Register/form.aspx?CID=84918>
    - [www.ca.com/databasemanagement](http://www.ca.com/databasemanagement)



# Basic Downtime Calculation Example

## Costs

1. Hours of operation (24hr operation enter 8736, 8hr enter 2080) \_\_\_\_\_
2. Number of employees \_\_\_\_\_
3. Average employee hourly wage \_\_\_\_\_
4. Annual company gross income \_\_\_\_\_

## Loss Variables

6. Cost per hour ( Line 1/ Line 4) \_\_\_\_\_
7. Lost wages (Line 6 \* Line 2 \* Line 3 ) \_\_\_\_\_
8. Enter total number of hours the systems are down \_\_\_\_\_
- Total Downtime Costs = (Line 8 \* Line 6) + (Line 8 \* Line 7) \_\_\_\_\_

Coupled with the primary financial impact of downtime are other attributed losses a percentage of companies experience:

- Lost productivity - 88.9%<sup>1</sup>
- End-user/management dissatisfaction - 87.1 %
- Customer dissatisfaction - 66.9%
- Overtime - 59.3%
- Lost revenues - 41.8%
- Lost transactions - 34.4%
- Lost customers - 23.1%
- Penalties or fines - 7.6%

<sup>1</sup>Contingency Planning Research