

# **Best Practice Service Development: Closing the Loop with Prometheus™**

Leonid Consulting

May 2007

V1.1

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**Document Revision History**

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Table 1 Document Log

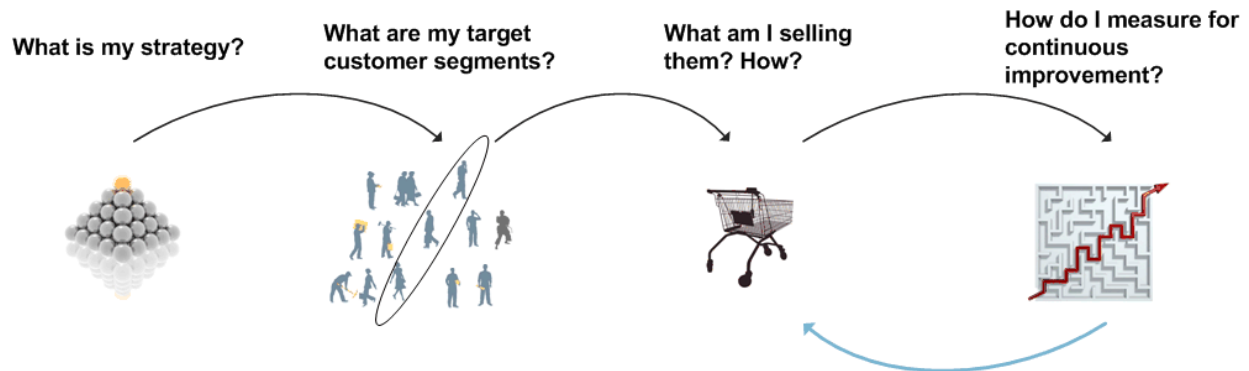
Version	Date	By	Comments
1.0	17 May. 08	Alex C	Initial Version

## 1 Introduction

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Today's most competitive service providers have seized on elements of the changed services landscape and exploited them for the benefit of their customers. But change is a constant in the communications services market and even the best plans require ongoing review and revision to stay competitive. This brief deals with data-driven decision making in the communications services market.

We will cover (in brief) the major elements of the service development process with emphasis on data-driven continuous improvement using our Prometheus™ service management platform.



The balance of this brief is organized around the four topics above: strategy, market segmentation, product sales, and continuous improvement.



## 2 Strategy

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### 2.1 How does strategy relate to service development?

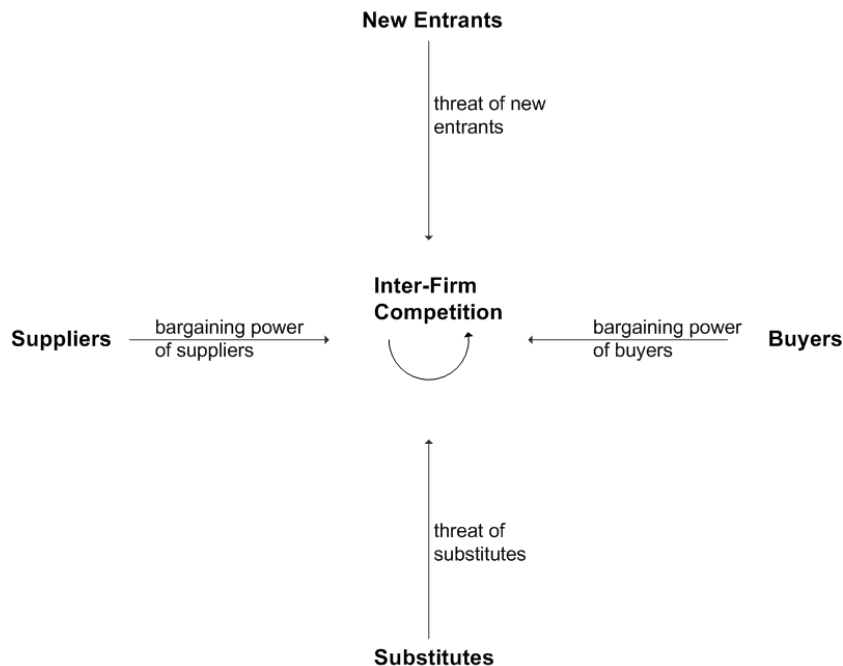
Without an adequately defined strategy for your firm, the service development process is likely to wander. At best, the various departments involved will operate according to their own particular preferences and priorities, which may not be in the best interest of the firm overall. An explicit corporate strategy will provide answers to many of the fundamental questions that arise during the service development process.

### 2.2 Can you give me an example of an explicit strategy framework?

While a full treatment of the strategy management process is beyond the scope of this brief, we will briefly review one popular, easy to use framework- Michael Porter's Five Forces<sup>1</sup>. The treatment we are able to provide here does not provide for strategy formulation from scratch, but if you can describe and validate your strategy against it, chances are you have one that is relatively robust. The framework provides for an analysis of the state of a market by looking at five key forces:

1. Bargaining Power of Customers
2. Bargaining Power of Suppliers
3. Threat of New Entrants
4. Threat of Substitutes
5. Competitive Rivalry within the Industry

The framework is most often depicted in a Cartesian plot:



In general, you would apply the strategy by defining details with regard to these five forces in your market. Then ask yourself the question: how is my firm uniquely positioned to compete in this environment?

Through the balance of this brief, we'll use a hypothetical example firm to provide abbreviated illustration of key points- "Law Office Solutions", which provides hosted applications to law offices in the greater Boston area. One caveat before we begin: We performed no research, empirical or otherwise, on law offices or the market for hosted services in the Boston area. The examples here are based on casual observation only (this won't surprise the reader!).

Law Office Solutions founder was previously the CIO at one of the area's larger firms and has a hands-on understanding of the technology and business process in use at law firms. Like many firms, law offices are in the midst of a transition from legacy technology to IP voice communications. Hosted services are newly of interest as the quality of these solutions increases and the requirements to keep pace with their clients' expectations on service quality drive the need for more technology implementation. Our intrepid founder ("Ed") aims to provide the highest quality hosted technology solution to law offices in the Boston area. His knowledge of the local market and insight into how to apply newly available technologies to the particular challenges of running a law office are key to his long term competitive advantage.

Below are a summary of Ed's notes on Porter's Five Forces:

### 1. Threat of New Entrants

Right now, he is the new entrant. The transition to IP communications and the newly available possibilities in hosted services have been disruptive to the market and he is entering the market with a new business model not available previously. While there is nothing to stop another firm with a focus on law offices from entering the market, in the time it would take them to get to market to compete, our CTO believes his team will be able to capture enough of the available market that the market will be unattractive for a new entrant with a similar business plan.

### 2. Bargaining Power of Buyers

The buyers have other choices, and there are only around half a dozen very large firms in the area which make up a substantial part of the available market. However, our CTO is counting on his insider knowledge of their cost drivers to press the sale of his solution, which he knows offers them substantial savings. The solution is an excellent value for smaller firms with limited IT organizations and he believes these sales will be easier.

### 3. Threat of Substitutes

On the voice side, Law Office Solutions' (LOS) most substantial competition comes from local value added resellers (VAR's) representing the major on-premise product vendors: Cisco, Avaya, and Nortel. Like LOS, these firms are local and their products they represent a pre-integrated solution with substantial R&D behind them. LOS is relying on the fact that these solutions are not inexpensive to purchase, they're proprietary, and they require substantial maintenance by the owner or its agents (the VAR's). Additionally,

since LOS's solution is hosted (resides in LOS' core network rather than on the customer's site) it offers a better proposition on disaster recovery and seamless operation between multiple sites. Finally, LOS is relying on the strength of the industry-specific portfolio of voice and other services, such as call recording and various other compliance applications, that it offers to law offices.

#### 4. Bargaining Power of Suppliers

LOS is in a good position here since it is implementing a multi-vendor standards-compliant system, versus a proprietary solution. They can, for example, switch phone vendors based on quality and cost where that is generally not an option on PBX's.

#### 5. Inter-Firm Competition

LOS has largely side-stepped this force by focusing on its particular niche.

### 2.3 How do I know when my strategy definition is ready to drive my service development?

At a minimum, your strategy should provide clear answers to the following questions that will arise during the balance of the service development process:

- Who am I selling to?
- What am I selling?
- Why do they want to buy it from me?



### 3 Customer Segmentation

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#### 3.1 Why segment?

Why segment? Is the general idea that "I sell hosted services to small to medium business that want to buy it", sufficient? It may be. Providing a general answer to that question is difficult and well beyond the scope of this paper. However, it is fairly clear that you are likely to be relatively disadvantaged with regard to many of this forces above without some kind of segmentation and focus. For example, if the extent of your segmentation is small-medium businesses (SMB's), then you will almost certainly be up against new entrants on a regular basis and endure an increased degree of inter-firm competition. How advantaged are you to a buyer when all you know about their business is that they are a small medium business?

Additionally, there is the problem of diffusion. The resources you invest in marketing, sales and support will yield better against a more focused target. A few simple examples are:

- product definition
- media buying
- sales training
- customer references/word of mouth
- deployment of sales representatives



"You cannot depend on your eyes when your imagination is out of focus."  
- Mark Twain

### 3.2 Who are my target segments?

Your specific segments with regard to size, industry, geography, technology should follow naturally from your strategy definition, which we covered above. What follows is a brief operational checklist on segmentation:

- Can I readily identify my target segments?

Obviously, you have to know one when you see one. However you're going to reach these customers (media, phone, direct sales) you'll need to be sure you can isolate them to avoid diffusion.

- Can I efficiently reach them with my marketing and sales resources?

The next question is whether you can reach them efficiently. Another way of looking at it is whether or not the cost of sales adds up your overall business plan. This is usually summarized in a cost/acquisition metric, which is a frequent culprit of insolvent business plans in the communications services sector.

- Do I understand the process of achieving attention, interest, desire, action with my target segment?

The AIDA framework is one simple way of thinking through the sales process. In this there is no substitute for on the ground experience in the segment(s). The attention and interest steps have primarily to do with your basic proposition being great for the customer, not just good, and being able to effectively get in front of the customer. Decision has primarily to do with being able to prove in your proposition and remove doubts. Action has primarily to do with making your product easy to buy.



## 4 Product Definition

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### 4.1 What am I selling to my segment?

There is an obvious answer to this question- I sell them what's on price list. But it's also important to understand what you're selling in terms of the daily life of your end user. What were they using before? How do they use it? What might they be using instead? Knowing the answers to these will provide critical information for the sale of your product, drivers of customer satisfaction, threats from competition, and possibilities for new products and other up-sells.

### 4.2 Why is it better than their alternatives?

What does your product do that the customer needs that competitive products cannot offer? Every successful franchise knows the answer to this question. Many unsuccessful franchises do not. Most successful operators don't divine the answer- they acquire it through continuous investigation of their customers' interaction with both their own product and competitive products.

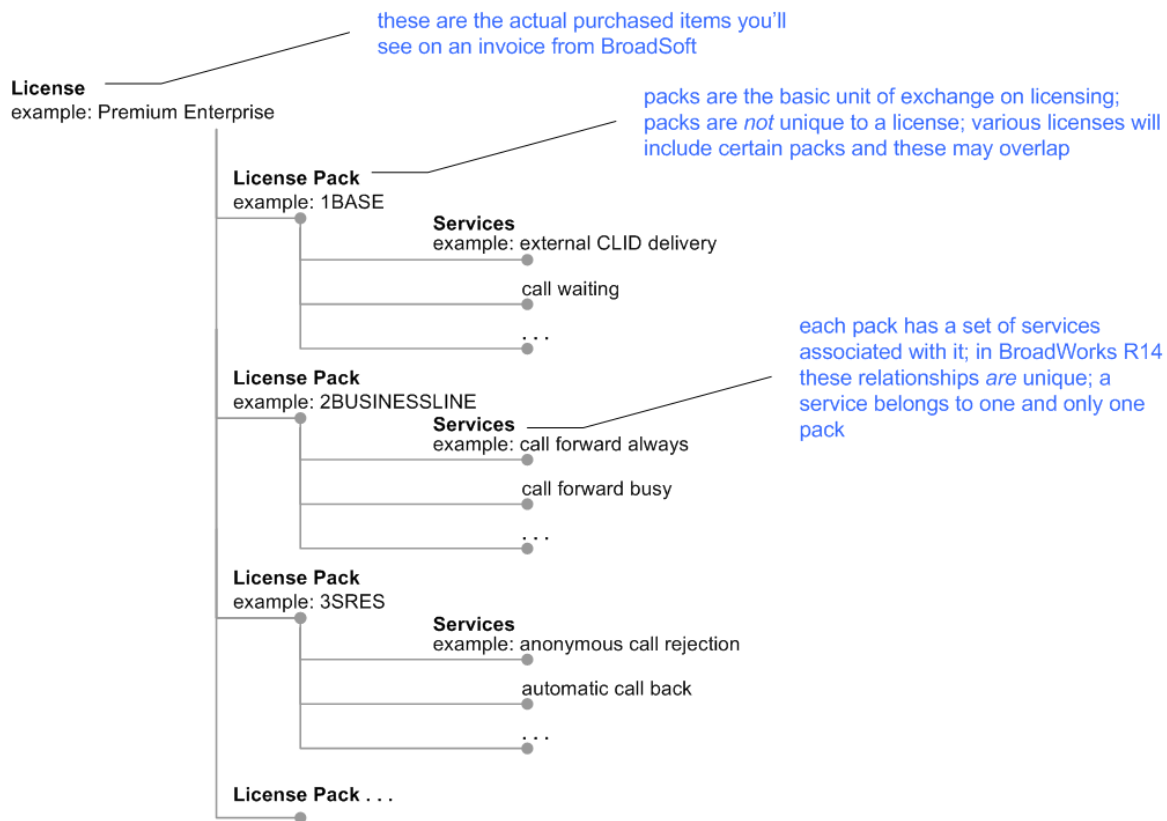
### 4.3 How much does it cost me to offer this product? Have I optimized?

The operational cost of deploying the product, often significant, is substantially more difficult to measure than capital cost since it is the accumulation of time spent by sales, sales engineering, deployment, and support. It is important to conduct periodic time studies and normalization of sites and/or seats deployed against the cost of your customer-facing organization to understand cost drivers in this area.<sup>1</sup>

Understanding standard costs on capital is relatively easy- you have your costing for phones, routers, etc. One area that can be somewhat more complex is software licensing. We've provided some insight on the problem below for the BroadSoft application server.

### 4.4 How does BroadSoft licensing work?

BroadSoft's licensing scheme has changed substantially in Release 14. The following figure provides an overview of the licensing scheme:

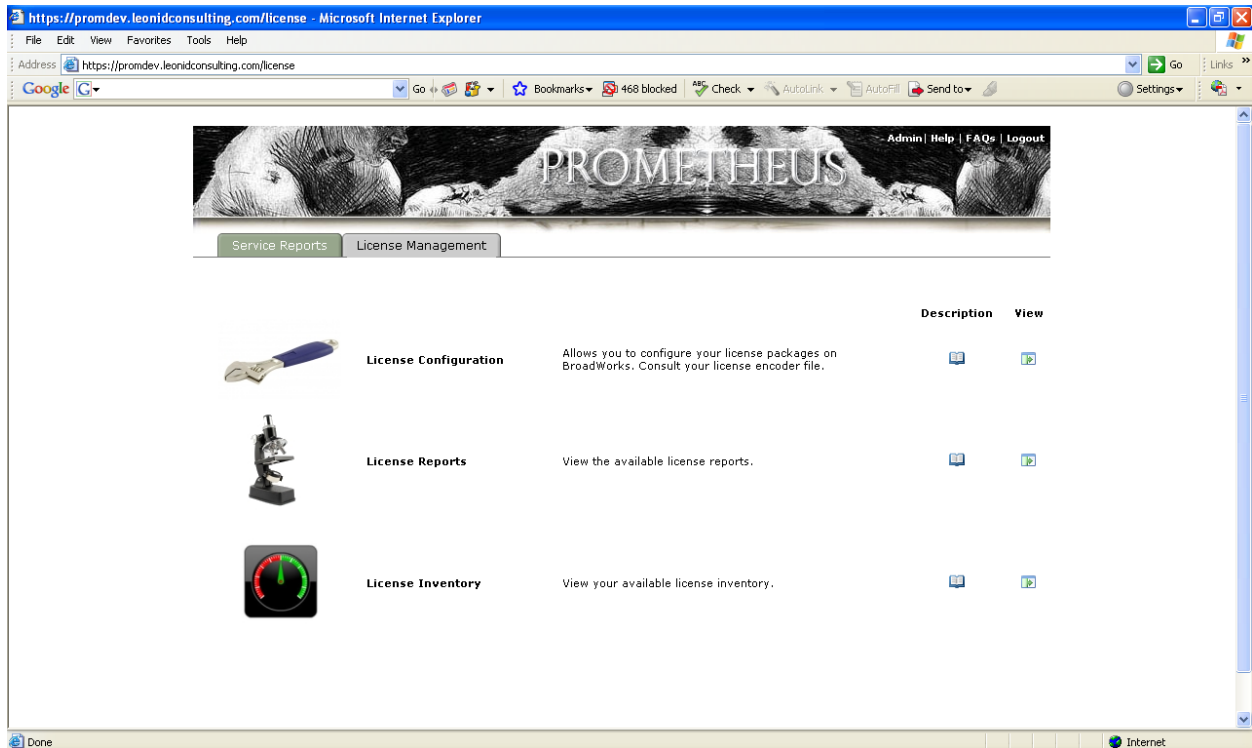


The scheme starts with a license, like Premium Enterprise. This is something you actually buy from BroadSoft. The actual currency of the license is the license “packs”. A pack is a set of services. Various licenses include various sets of “packs”. For instance, the Standard Enterprise license might include pack A, B, C. The Premium Enterprise license might include packs A, B, C, D, E, and F. The packs in turn include various user services. In R14, each user service is a part of one and only one pack. Here is the key in terms of actual license consumption: whenever you assign a service, one unit of its “pack” is decremented from your available license total. Let’s say user services 1, 2, and 3 are in pack A. Once I assign a user service 1, I’ve consumed one instance of pack A. I can assign that same user services 2 and 3. But if I assign service 3 to a *different* user, I consume another instance of pack A.

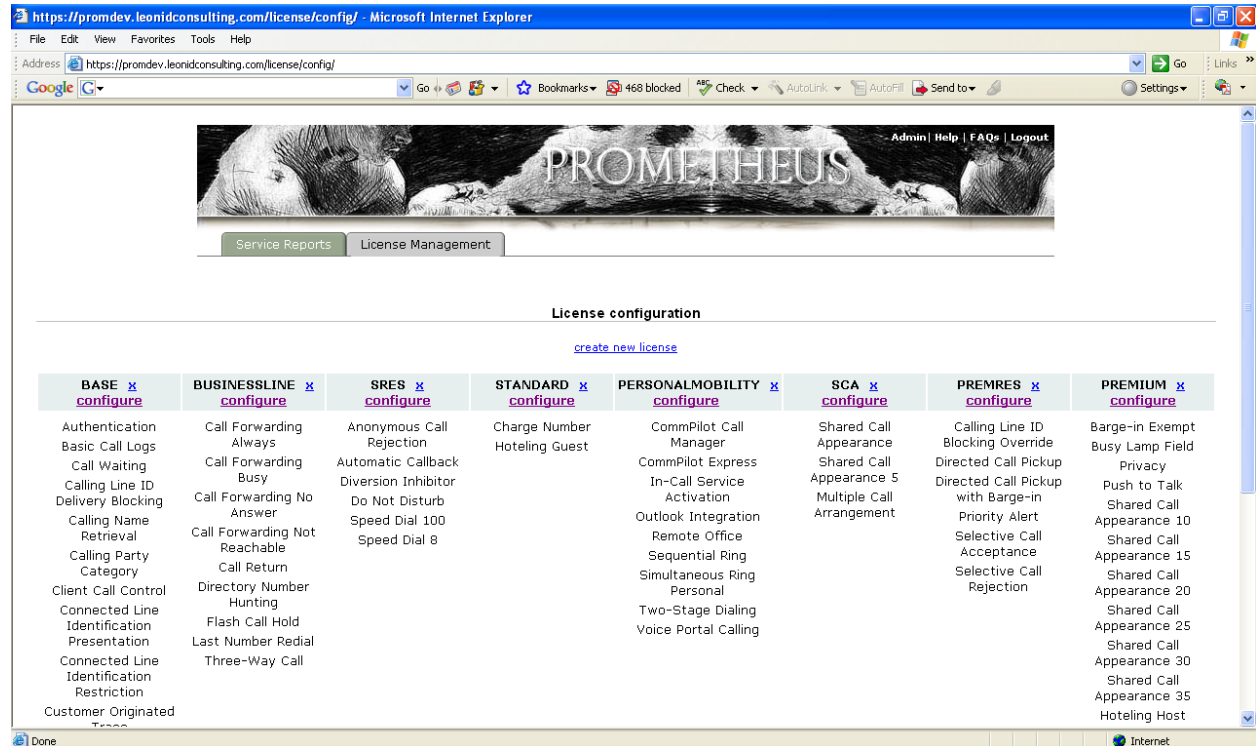
<sup>1</sup> Shameless plug: request a business process audit from Leonid Consulting!

#### 4.5 How does Prometheus manage BroadSoft licensing?

Our Prometheus™ provides a simple view into application server costing and its drivers. Prometheus allows you to model, analyze, and track your application server licensing down to the user account level. The following screen shows the primary menu:



The license configuration screen allows you to specify your license packages for use by the analytics in Prometheus:



**License configuration**

[create new license](#)

<a href="#">BASE x configure</a>	<a href="#">BUSINESSLINE x configure</a>	<a href="#">SRES x configure</a>	<a href="#">STANDARD x configure</a>	<a href="#">PERSONALMOBILITY x configure</a>	<a href="#">SCA x configure</a>	<a href="#">PREMRES x configure</a>	<a href="#">PREMIUM x configure</a>
Authentication	Call Forwarding Always	Anonymous Call Rejection	Charge Number	CommPilot Call Manager	Shared Call Appearance	Calling Line ID Blocking Override	Barge-in Exempt
Basic Call Logs	Call Forwarding Busy	Automatic Callback	Hoteling Guest	CommPilot Express	Shared Call Appearance 5	Directed Call Pickup with Barge-in	Busy Lamp Field
Call Waiting	Call Forwarding No Answer	Diversion Inhibitor		In-Call Service Activation	Multiple Call Arrangement	Priority Alert	Privacy
Calling Line ID	Call Forwarding Not Reachable	Speed Dial 100		Outlook Integration		Selective Call Acceptance	Push to Talk
Delivery Blocking	Call Return	Speed Dial 8		Remote Office		Selective Call Rejection	Shared Call Appearance 10
Calling Name Retrieval	Directory Number Hunting			Sequential Ring			Shared Call Appearance 15
Calling Party Category	Flash Call Hold			Simultaneous Ring Personal			Shared Call Appearance 20
Client Call Control	Last Number Redial			Two-Stage Dialing			Shared Call Appearance 25
Connected Line Identification	Three-Way Call			Voice Portal Calling			Shared Call Appearance 30
Presentation							Shared Call Appearance 35
Connected Line Identification Restriction							Hoteling Host
Customer Originated							

The license reporting interface allows you to analyze your use of licenses up and down the BroadWorks hierarchy. The following screen shows the system level summary, the most aggregated report. The User Count metric measures total user accounts consuming the license package in question; the Average Services per User metric measures the average number of services assigned from the pack to the user in question; Total Services shows the total services available in the license pack.

System

Enterprises

Groups

Users

Actions:

[System Summary](#)



### System Summary

	BASE	BUSINESSLINE	SRES	STANDARD	PERSONALMOBILITY	SCA	PREMRES	PREMIUM
User Count	65	62	57	18	57	56	55	54
Average Services Per User	10.58	5.68	5.18	1.39	6.79	2.20	5.65	8.76
Total Services	21	9	6	2	9	3	6	12

Summary and detail reports are available at the Enterprise (and Service Provider) level as well as the Group level. The following screens show the Group Summary and the Enterprise Detail report:

System

Enterprises

Groups

Users

Actions:

[System Summary](#)



### Group Summary Report

Enterprise:

Group:

Enterprise (Id)	Group (Id)	BASE	BUSINESSLINE	SRES	STANDARD	PERSONALMOBILITY	SCA	PREMRES	PREMIUM
Click2Dial Lab (00050)	Click2Dial Lab1 (0005000001)	4	3	2	2	3	2	2	2
BS14 Training (00276)	Training Development (00003)	0	0	0	0	0	0	0	0
BroadSoft - Business Trunking (00280)	Lab testing (0028000001)	3	3	3	2	3	2	2	2

File name:

(Enterprise Detail Report)

- System
- Enterprises
- Groups
- Users

Actions:  
[System Summary](#)

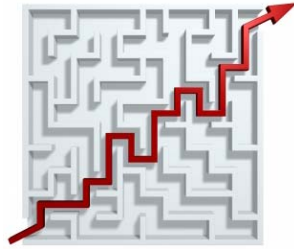


## Enterprise Details Report

Enterprise:

### Enterprise License Report: LeonidEnt(Leonid\_ENT) License Usage

	BASE	BUSINESSLINE	SRES	STANDARD	PERSONALMOBILITY	SCA	PREMRES	PREMIUM
User Count	2	0	0	0	0	0	0	0
Average Services Per User	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Services	21	9	6	2	9	3	6	12
Service Packs:								
Basic (0/unl)	3	0	0	0	0	0	0	0
fax (0/unl)	0	0	0	0	0	0	0	0
Office (0/unl)	3	0	0	0	0	0	0	0

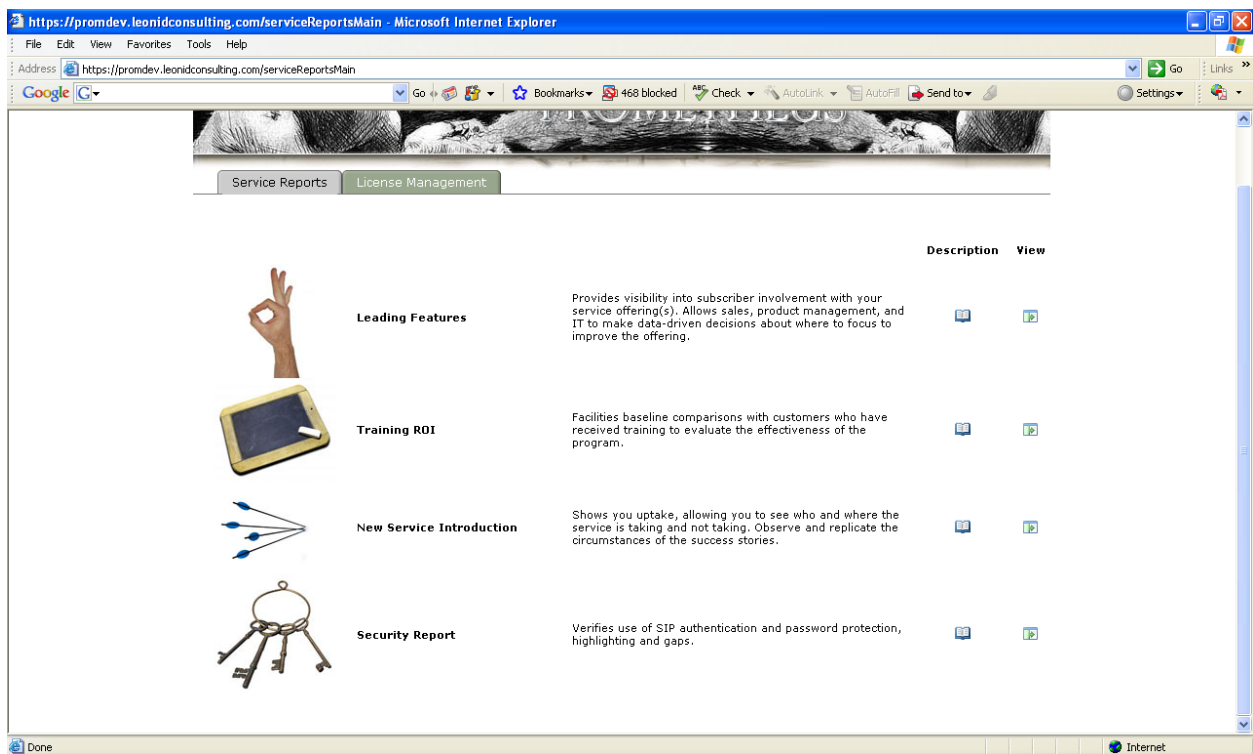


## 5 Continuous Improvement









### 5.1 How do I continuously improve my performance?

The best way to continuously improve operational performance is with data-driven decision making. Most importantly for a firm in the communications services business, it is critical to understand how users are interacting with your service. For example, you believe that simultaneous ring is going to be very popular with the law firm's executives. Were you right about that? Are they using it? If they're not using it, why not? Do they not find it useful? Are they aware of it? Do they know how to use it?

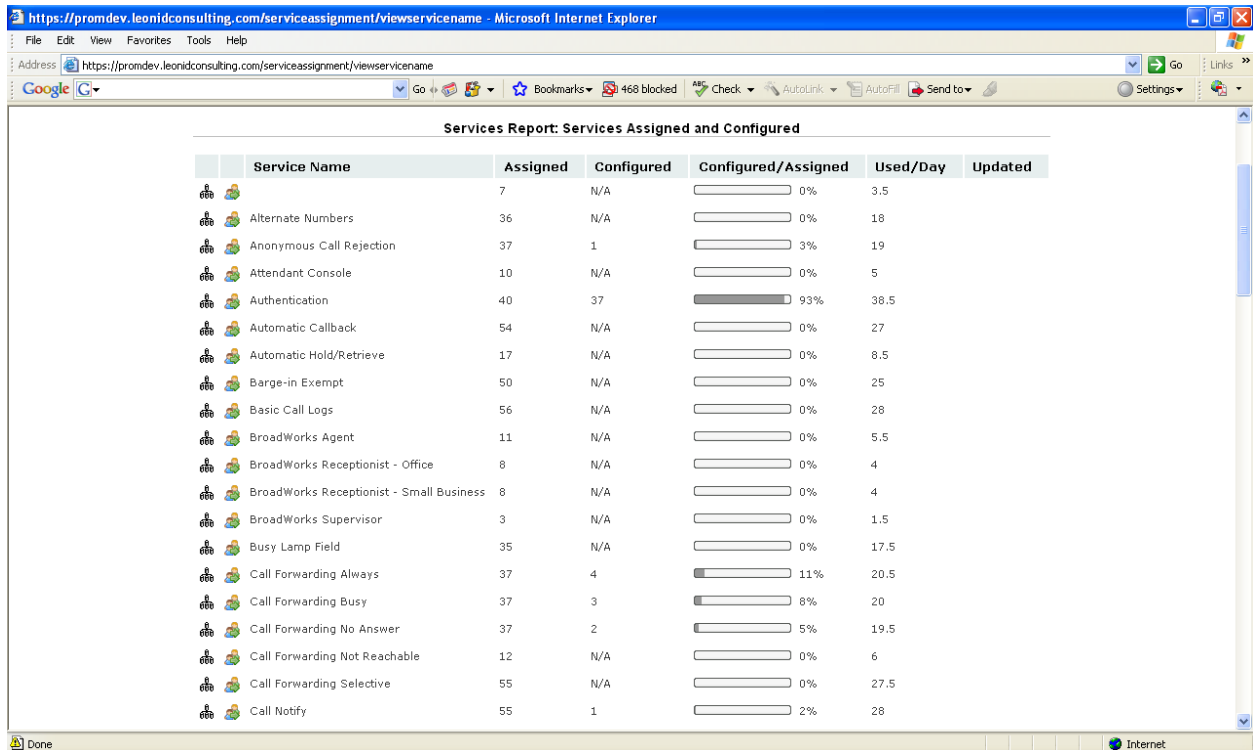
Our Prometheus™ product allows you to close the loop on service development with a series of reports specifically designed to present actionable data:



The screenshot shows a web browser window with the URL <https://promdev.leonidconsulting.com/serviceReportsMain>. The page has two tabs: "Service Reports" (selected) and "License Management". Below the tabs is a table of reports:

	Description	View
 <b>Leading Features</b>	Provides visibility into subscriber involvement with your service offering(s). Allows sales, product management, and IT to make data-driven decisions about where to focus to improve the offering.	
 <b>Training ROI</b>	Facilities baseline comparisons with customers who have received training to evaluate the effectiveness of the program.	
 <b>New Service Introduction</b>	Shows you uptake, allowing you to see who and where the service is taking and not taking. Observe and replicate the circumstances of the success stories.	
 <b>Security Report</b>	Verifies use of SIP authentication and password protection, highlighting and gaps.	

The Leading Features report, for example, let's you look at which services subscribers are actually using:



Service Name	Assigned	Configured	Configured/Assigned	Used/Day	Updated
	7	N/A	0%	3.5	
Alternate Numbers	36	N/A	0%	18	
Anonymous Call Rejection	37	1	3%	19	
Attendant Console	10	N/A	0%	5	
Authentication	40	37	93%	38.5	
Automatic Callback	54	N/A	0%	27	
Automatic Hold/Retrieve	17	N/A	0%	8.5	
Barge-in Exempt	50	N/A	0%	25	
Basic Call Logs	56	N/A	0%	28	
BroadWorks Agent	11	N/A	0%	5.5	
BroadWorks Receptionist - Office	8	N/A	0%	4	
BroadWorks Receptionist - Small Business	8	N/A	0%	4	
BroadWorks Supervisor	3	N/A	0%	1.5	
Busy Lamp Field	35	N/A	0%	17.5	
Call Forwarding Always	37	4	11%	20.5	
Call Forwarding Busy	37	3	8%	20	
Call Forwarding No Answer	37	2	5%	19.5	
Call Forwarding Not Reachable	12	N/A	0%	6	
Call Forwarding Selective	55	N/A	0%	27.5	
Call Notify	55	1	2%	28	

The Configured field tells you whether a subscriber has configured a feature, indicating the service is in use. The Configured/Assigned ratio is a strong proxy for the take rate on a service. The usage/day metric allows you to see how often a service was actually invoked by a subscriber. The data above is aggregated at the system level. The icons to the left allow you to look deeper, determining how utilization varies across your segments and individual customers. Find the customers that are actually using the service and figure out what it is about them that you can replicate! Do they operate with customers who are not engaging with the service. The pop-ups below show utilization of the simultaneous ring service at the Group Level:

https://promdev.leonidconsulting.com/serviceassignment/view servicename - Microsoft Internet Explorer

Address: https://promdev.leonidconsulting.com/serviceassignment/view servicename

Service	Assigned	Configured	Assigned / Configured	Used / Day
N-Way Call	28	N/A	0%	14
Outlook Integration	51	32	63%	41.5
Physical Location	10	N/A	0%	5

**Simultaneous Ring Personal**

Enterprise	Group	Assigned	Configured	Assigned / Configured	Used / Day
00006	0000600020	12	1	8%	6.5
00006	0000600021	1	0	0%	0.5
00007	0000700001	2	0	0%	1
00007	0000700002	4	0	0%	2
00007	0000700003	2	0	0%	1
00050	0005000001	3	0	0%	1.5
00280	0028000001	2	0	0%	1
00280	0028000002	1	0	0%	0.5
00280	0028000004	1	0	0%	0.5
00280	0028000005	1	0	0%	0.5
00399	0039900001	3	0	0%	1.5
02646	0264600019	0	0	0%	0
02743	0274300001	21	0	0%	10.5
02743	0274300002	2	0	0%	1

Simultaneous Ring Personal	55	1	2%	28
Speed Dial 100	56	N/A	0%	28
Speed Dial 8	56	N/A	0%	28

## 6 Appendix A: What is Prometheus?

### 6.1 What does Prometheus do?

Prometheus retrieves service “signatures” by mining your VoIP subsystems and organizes these signatures into an actionable reporting framework.

Prometheus reports include:

#### Leading Features

How often subscribers are using each feature you offer?

#### New Service Introduction

Are you customer's taking to your newest services? Which ones? Why?

#### Licensing

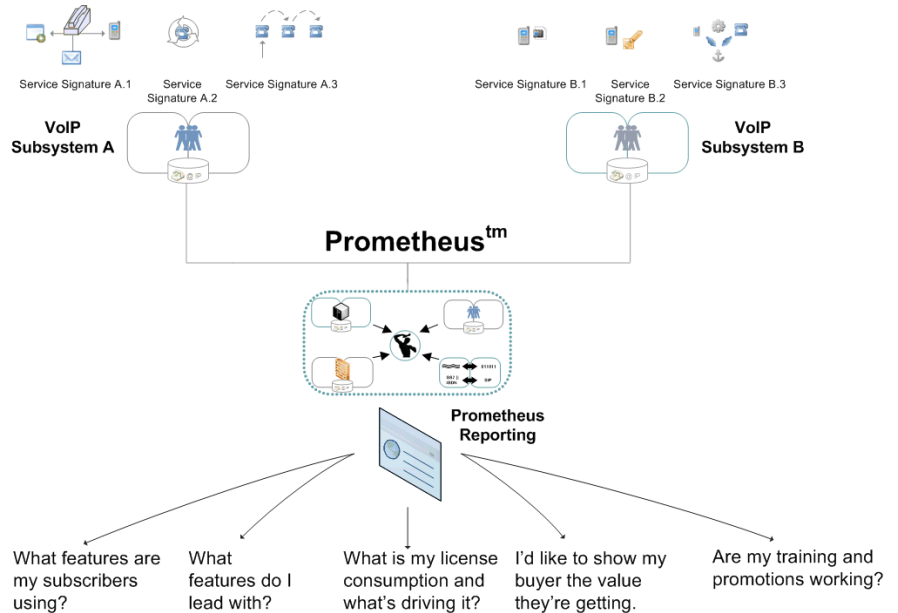
The licensing report shows you the consumption of licenses across the systems vs. services assigned vs. subscriber utilization.

#### Security Audit

Have you secured the access portion of your network?

#### Training ROI

You've invested in training. Is it making a difference?



## 6.2 How does Prometheus work?

Prometheus has three primary components:

### 1. Web-Based Front End

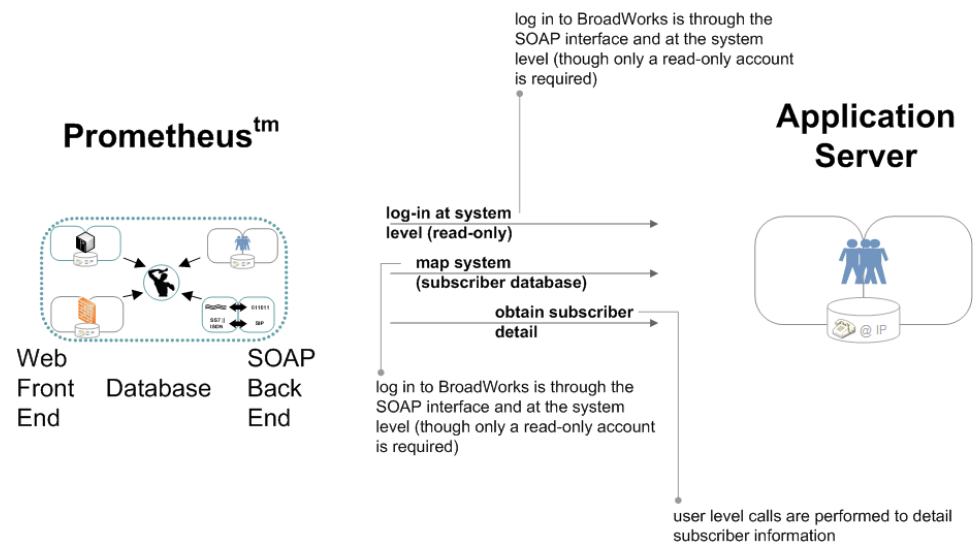
This is the only part of Prometheus users normally see. Here you can find critical information on your systems organized in a way that allows you to act to improve the performance of your business.

### 2. Database

This is where we store information on the systems we inspect.

### 3. SOAP Back End

This is where we actually implement the various models we use to acquire the information you need. The following diagram provides an overview of the process for the BroadSoft subsystem adapter:



## 7 References

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<sup>i</sup> Porter, M.E. (1980) *Competitive Strategy*, The Free Press, New York, 1980.