

# The IT Service Catalog Toolkit

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# THE IT SERVICE CATALOG TOOLKIT

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# THE IT SERVICE CATALOG TOOLKIT

This toolkit aims to empower an IT Manager with best-practices in researching, building, implementing, reporting and improving an IT Services Catalog.

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Note: All references to “IT” in these guidelines equally apply to “Telecommunications” as the processes for their provision and support are the same.

## Overview of IT Services and Catalogs

Many IT users are confused over IT Services, Service Level Agreements (SLAs), how to create, document, and use them to benefit both IT and IT’s customers—whether they are internal corporate users or external customers and partners. This “how to” article discusses these issues and answers questions on the concept of a Service Catalog.

The IT Infrastructure Library® (ITIL [www.itil.co.uk](http://www.itil.co.uk)) defines a service as “one or more IT systems which enable a business process.” Today’s IT departments deliver comprehensive portfolios of services and also support them – IT is recognized more than ever as a vital business enabler whose proper management can yield immense tangible and intangible benefits for the organization.

Service Level Management (SLM) is managing services so that IT delivers cost-effective services, and users are satisfied. The goal of SLM is to maintain and improve IT Service quality through a constant cycle of agreeing, monitoring, and reporting to meet the customer’s objectives.

### What Is An SLA?

Service level agreements (SLAs) are formal or informal contracts between IT and the owner of the business process, setting out the services to be delivered and the quality or level of service. An SLA might guarantee a 99% availability of an on-line application, as well as penalties if that guarantee is breached.

Operational Level Agreements (OLAs) define the internal agreement for IT service provision (between IT and the customer). Meanwhile, the Underpinning Contracts (UCs) define the IT service agreement with external suppliers (for services which support the IT department). Both OLAs and UCs must be negotiated and finalized before the SLA can be written since they form the basis for it.

One of the core tools supporting SLM best practices is the Service Catalog. It provides a *customer-perspective* of the IT Services available and associated information (e.g. how to obtain those services, how much they cost) in simple, non-technical language. It is a customer facing document

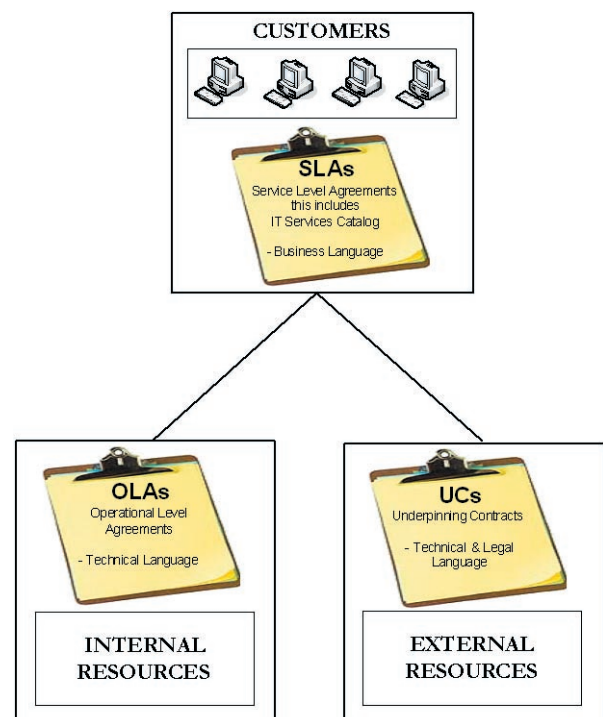


Figure 1: SLAs, OLAs, and UCs

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written in plain, business language listing the IT services available and their detailed descriptions. The Service Catalog provides the interface between the customer and IT.

## ***How Can Our Service Catalog Benefit My Organization?***

Once completed correctly (these guidelines will help you achieve that), the Service Catalog can yield numerous tangible and non-tangible benefits for the organization. These include the following:

1. The Service Catalog is a powerful communication tool for the customer to gain clarity on what services are available and how to obtain and use them.
2. IT is forced to take the customer perspective and elevate the importance of customer satisfaction, thus it aids in the alignment of IT with the business.
3. Due to the comprehensiveness of the catalog, many gaps, inconsistencies and areas of improvement in the IT department may be discovered during the catalog development process.
4. The customer expectations become more realistic, fair and predictable as the catalog defines precisely the IT organization's ability to deliver services.
5. The service delivery metrics in the catalog allow service usage to be quantified, e.g. number of laptop requests per month.
6. Historical reporting of service support metrics provides insight into the recurrence of problems and can assist in root cause analysis.
7. These combined metrics can also assist in trend analysis.
8. By recording metrics of customer satisfaction in the catalog, it becomes a tool for accurately measuring this over time.
9. The service catalog helps demonstrate the link between IT and core business processes, helping management realize the value of IT and increasing IT's stature in the company.
10. The service catalog can help manage chargeback by providing service costs and volume usage information.

## ***How Do I Define My IT Services?***

Accurately identifying and cataloging your organization's services is the foundational building block to creating a service catalog based on service management best practices.

IT people sometimes find it difficult to accurately identify a service. When making a first attempt (most probably by brainstorming) at listing IT services, an IT Manager may produce a mega-list of over 100 services she believes her IT organization offers. By the end of the definition process, a minimal number of services are actually listed in the catalog; usually not more than 10 to start with. This drastic reduction is often due to *technical* people being afraid to meet a *customer* perspective. However, the Service Catalog will be constantly improved and updated, so the first version should be simple. More services can be added later when the benefit to all has been realized.

Here are some experience-based guidelines on how to select your list of services:

### **1. Start by speaking with the customer**

A good starting point is to begin discussion with the customer at this early stage – ask them what services IT offers them -- in all probability this will be the most accurate list of services you can select to begin with.

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## 2. Keep it simple

It's extremely easy to make things too complicated – let your initial list of services not exceed 10 in number at the very maximum; 5 would be a better starting point.

## 3. Bundle services

Try to create service bundle packages to give to the customer. For example, when your customer receives a PC, they probably also get the following:

- Installed Operating System (e.g. Microsoft Windows XP Professional)
- Installed Office Productivity tool (e.g. Microsoft Office 2003)
- Installed Antivirus tool (e.g. Norton's Antivirus)
- Delivery of computer and installation into the customer's office
- Configuration of computer into corporate environment for access to IT services (e.g. internet access)
- Print services (this is usually bundled with a computer, although color printing may be a separate option due to the high cost)
- Updates and central maintenance for those tools and services
- Other services as determined by your corporate policy

So when you offer your customer a “computer” he/she actually gets all of these bundled with it. This will simplify the catalog and the SLAs associated with bundled services.

## 4. Chargeback as an indicator

Even if you don't plan to formally implement chargeback, services which *would* be charged for are often the ones to list in the service catalog. This is because the other services are usually either bundled or background services (e.g. LAN connectivity) and not charged for separately.

## 5. Don't mention all the “background” or “internal” services

Many services which the IT organization performs or manages (as some of them may be outsourced) actually support a single service. For example consider what the customer may refer to as the “Internet connectivity” service. In the background IT (using internal and external resources) is providing the following services in order to deliver that one service:

- a. Planning, installing, administering and managing the underlying infrastructure (hardware, software, documentation, etc.)
- b. Liaison and contract management with the ISP for installing and monitoring the link quality.
- c. Defining, implementing, monitoring, and enforcing the security policies for the Web and proxy servers, firewall and end-users.
- d. Providing 2nd and 3rd level support for end-user Internet connectivity problems.
- e. Monitoring bandwidth consumption and capacity planning.

## 6. Define options

Try to distinguish between a “service” and the variant “options” or characteristics of a service. For example, a typical organization may have the following 4 different types of monitors:

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- 19" CRT (Cathode-Ray Tube)
- 21" CRT
- 19" LCD (Liquid Crystal Display)
- 21" LCD

These should be defined as selectable options for the customer to choose; each one with its associated cost. While asset distribution is usually controlled by corporate IT policies (e.g. only the CAD operators can have a 21" LCD screen) or by cost (any staff member can have any screen so long as their manager agrees to pay the cost from their own budget), the Service Catalog will have all the options and costs listed as one service.

The "print" service may offer your customer the following options:

- normal black and white (B+W) printing
- color laser printing
- A3 laser B+W printing
- A0 plotters

The first would most likely be bundled with basic connectivity; the remainder could be add-on options with charges if necessary.

## First Catalog

So here is a typical initial list of services you might start your services catalog with if you are starting this effort from scratch:

1. PC provision
2. Internet connectivity service
3. Email service
4. Telephone (landline) service

An example SLA might be as follows:

**Name of Service:** Internet Connectivity

**Brief Service Description:** Provision of Internet Connectivity with 99% uptime.

The meaning of 99% uptime should also be mentioned in non-technical terms, e.g. "99% uptime is equal to 7.2 hours of unplanned downtime based on a 24\*7\*365 calculation on a 30-day month"

## Practical Considerations in SLAs

### How Do I Define My IT Service Costs?

Even if you are not planning to exchange actual money between your departments, it's still a very useful idea to setup chargeback to help gauge how much the corporation is spending on IT and get clarity on the distribution of expenditure. This management information can help IT allocate resources, lobby for additional expenditures, and show the value of IT.

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There are a number of pricing policies used today (such as cost plus, going rate, etc.); from experience, I would recommend wherever possible to stick to *market rate*. This really is the fairest way to assess your service value since in an open market, the customer could ideally obtain the same service from a competitor.

To work out market rates one would take the following steps:

1. Equip yourself with a very *accurate* and *detailed* service description
2. Survey the open market for an *identical* service – compare the service descriptions to ensure they match.
3. Don't just look at the service *provision* descriptions, also compare the service *support* descriptions (they should also match).
4. Try to get at least three of these like-for-like comparisons and average them.
5. In many cases, you may find service descriptions that *almost* match. In this case make a cost adjustment proportional to the difference.
6. Remember to consider scale, and compare like-for-like. Comparing dissimilar service scopes would be unjust and inaccurate.

This process should yield a reliable market rate cost of that product or service in your local market at that particular time (remember market rates fluctuate dynamically). That is the cost your customer should be billed.

Internet Procurement may show that a product or service can be sometimes better and cheaper from non-local providers. In the case of costing these, the overheads must be incorporated into the calculation, e.g. import taxes, logistics, localization issues, etc. and the quality of non-local support must also be considered.

## **How Do I Select My Metrics And Define Their Levels?**

A metric (also known as a Key Performance Indicator or KPI) is a measure for assessing performance in a particular area, in this case measurement of service *provision* and service *support*.

Here are some guidelines to help you choose the right metrics and select the right performance levels:

### **1. Types of metrics**

It's easy to go overboard with KPIs—the challenge again is simplicity and a focus on the business benefit of measuring the selected KPIs. To begin with, I would suggest you have just a couple of metrics from each of the following 3 categories:

#### ***a. Request fulfillment metrics***

These measure time durations from the time a service is requested or a problem reported until the issue is resolved and closed.

E.g. for requesting a new PC, the *delivery time* may be 16 working hours. For a problem reported which medium impact, the metrics may be a *response time* of 2 hours, and a *repair time* of 4 hours.

#### ***b. Availability metrics***

For many IT services monitoring their uptime is crucial, e.g. you may promise your customers 99.9% uptime for their Internet connection during working hours and 95% for non-working hours.

#### ***c. Call center effectiveness and efficiency metrics***

These would be used to the support service performance. Typical examples include following:

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- the call abandonment rate should not exceed 5%
- 95% of customers will not have a waiting time greater than 3 minutes
- all help desk engineer ratings should be above 95%.

It's a good idea to start with just a few metrics and then build upon that once your organization becomes proficient in managing their collection, reporting and analysis.

## 2. Involve techies

Metrics such as “availability” can be very complex to measure. Operational managers and technical specialists should be consulted early on to ensure the feasibility of capturing these and to verify accuracy of the catalog's service descriptions. The organization's capabilities for capturing these metrics and reporting on them must be considered.

Technical staff also have the best knowledge of the levels of service that IT can actually deliver. It makes no sense, and is quite harmful, to guarantee SLAs that cannot be met. It degrades respect for IT, demoralizes staff, and makes users angry when promises are not kept.

## 3. Defining service levels

In terms of defining what threshold levels to assign for metric performance, I would suggest the following:

**Consult recognized standards bodies.** Every area has accepted and recognized bodies that are long-established and trusted for their impartiality and accuracy. For example in the area of help desk management, the Help Desk Institute ([www.thinkhdi.com](http://www.thinkhdi.com)) surveyed over 700 company's help desks and published the findings in their “Practices Survey.” Those results reliably reflect market standards in the area of help desk operations and management.

**Realize your capabilities.** Depending on your IT organization's maturity and effectiveness, you may need to lower the expected service levels in order to be more realistic. A good SLM program will undertake to continually expand and improve the services and service levels—starting with what you can actually deliver is the best course.

## A Model Service Catalog Template

This section contains the outline of an IT Service Catalog with headings and a description of the required content. Practically, your Service Catalog may look different; it can be anything from a simple Microsoft Excel table, to an intricate SLM application which logs metrics and auto-generates the required reports.

1. **Introductory information.** The first page should mention the version number, date of last update, and author/owner information.
2. **CIO Introduction.** A letter signed by your CIO (or equivalent) indicating his/her support, the importance of the service catalog, and the cooperation expected from employees.
3. **List of Services.** The Service Catalog lists all Services currently provided, e.g. a desktop computer, telephone, cell phone, email, internet, laser-color printing services, etc.
4. **Service Levels.** The Service Levels available to the customer, e.g. Bronze, Silver, and Gold service levels. These can represent tiered service levels, e.g. a Bronze level internet user might have a 4-hour response time, while the Gold level customer may be guaranteed a response within 1 hour.
5. **Service Scope & Description.** A brief description of the Service and definition of the scope, i.e. what the customer can expect to receive.



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6. **Service Delivery Locations.** Describe where the particular service is available, e.g. you may offer a higher Internet bandwidth in your head office than is available in remote office locations.
7. **Availability Times.** Mention the timings for when a service is available, e.g. your help desk may be open from 8am to 6pm Monday to Friday only. Availability of your *services* and *support* function should be mentioned separately.
8. **Customer Procedures.** How does the customer request the service? What are the customer's responsibilities while using the service? How is acceptable use of the particular service defined?
9. **Cost.** Especially if there are plans to implement chargeback at some point, it's important for the customer to know how much the service will cost.
10. **Metrics for Service Provision.** For the respective service, what best practice KPIs will be measured. Service Support. If the promised service delivery is not received, how does the customer report the problem?
11. **Metrics for Service Support.** These can be captured by the Help Desk system; they define typically how fast a problem can be attended to and the threshold levels for rectifying the problems.
12. **Assumptions and Restrictions.** Not all services can be provided at all places at the same level, so restrictions to service delivery or support can be listed here. Listing assumptions for extra clarity in this optional section will greatly reduce the room for ambiguity.

## Service Catalog Performance Reporting

Based on the metrics you selected for your service catalog, it's very important to gather data for them and publish this regularly in a report. There should be two parts:

- Part one for operational managers to assess the volume usage and the customer satisfaction in receiving those services.
- Part two for management to gauge a high-level summary of performance.

Here are some guidelines to assist you in the process:

1. Assign a report owner whose is responsible for data collection, report composition, timely delivery, and content accuracy.
2. Consider purchasing a tool to auto-generate these reports. The SLM Buyers Guide published by Enterprise Management Associates ([www.slm-info.org](http://www.slm-info.org)) has a comprehensive overview of these tools and gives valuable buying advice for the IT Manager.
3. Wherever possible, use graphs to supply a visual overview.
4. At the front provide an Executive Overview for board-level and senior management to get a high-level and comprehensive view of performance.
5. Include historical information to facilitate trend analysis.
6. Include a section entitled Conclusions, which may have a bulleted list of analysis and recommendations.
7. Include a section entitled Updates, which mentions what actions were taken to reduce risks, improve the service, deal with problems etc.
8. There are lies, damn lies and reports! Make sure the document reflects reality and isn't just a marketing exercise.

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## ***Closing Point***

The final point worth mentioning is that diligent procedures for change control of the service catalog are important. One technique is to make the catalog a configuration item (CI) in your Configuration Management Database (CMDB); therefore all changes must follow the set process for requesting and making changes.

Periodically, for example quarterly, the Service Catalog should go through a comprehensive Service Improvement Program (SIP). In between those SIP sessions, all contributors and stakeholders should be encouraged to give feedback for improving the Service Catalog and associated processes. You could set up an email box whereby staff can easily send their recommendations.

The purpose of this article was to provide a brief and introductory overview to development of IT Service Catalogs with some recommendations. Please feel free to send your comments and suggestions to the author ([mail@musabqureshi.com](mailto:mail@musabqureshi.com)).