

MOF 4.0

Microsoft Operations Framework 4.0

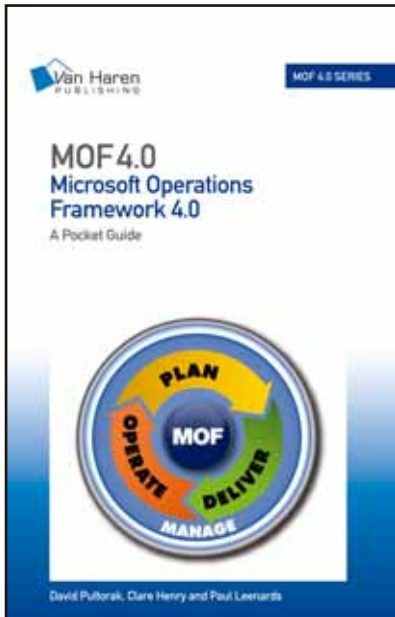
A Pocket Guide



David Pultorak, Clare Henry and Paul Leenards

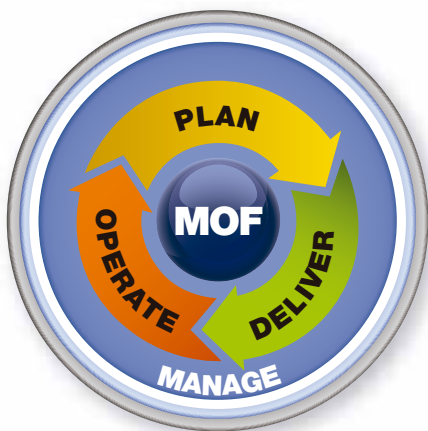
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Title:	MOF 4.0: Microsoft Operations Framework 4.0 - A Pocket Guide
Authors:	David Pultorak (Lead Author), Clare Henry and Paul Leenards
Publisher:	Van Haren Publishing, Zaltbommel, www.vanharen.net
ISBN:	978 90 8753 286 4
Print:	First edition, first impression, September 2008 First edition, second impression, July 2010
Layout and design:	CO2 Premedia, Amersfoort-NL
Cover design:	O2, Norwich, UK
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Foreword

Successful IT requires knowledge and process—not just products and technologies. And providing this guidance is a growing concern: just look at the abundance of service management frameworks available for a variety of industries.

The big bet with IT management frameworks is that relatively small changes in thinking and acting on the part of IT professionals will bring about large improvements in costs, productivity, customer and employee satisfaction, and the availability and reliability of IT services.

With MOF 4.0, Microsoft takes up this big bet. This pocket guide presents MOF 4.0 in capsule form.

Just for a moment, think of a management framework as you would a vitamin supplement. As anyone who's ever had a cold knows, it's never enough to just offer the pill itself; timing, dosage, and mode of delivery have a lot to do with whether you stay well or get sick. Well, it's the same with IT service management guidance: it's not enough to get the content right. Getting through to overworked, distracted IT pros—really getting them to think and act differently—requires getting the “dosage” and delivery method right. So what does “right” look like? It's...

...**relevant**. It speaks to real IT pros in real roles, about problems that are of current concern to them, that affect their day-to-day activities and deliverables.

...**practical**. It is actually useful in solving problems and pursuing opportunities in a meaningful and directed way. It's at the right “zoom level” to be useful—you don't need a

map of the universe if you're just trying to find the grocery store.

...**concise**. It quickly gets to the point—IT pros have zero time to waste.

...**structured and extendable**. It's organized in a manner that is easily navigable, with links to further guidance, services, products, and solutions.

...**outcome-focused**. It concentrates on key results, and provides ideas for getting there, with room for multiple paths to the same end. Guidance that focuses on activities without a clear vision or tie to their intended business results is theoretical, not practical.

...**community-driven**. It's been created and enhanced by, and for, like-minded IT professionals. It's open and free to use, and there are plenty of opportunities to contribute back.

MOF 4.0 was designed to get IT service management guidance right. It's refreshing to me to see a framework that recognizes the vital importance of IT pros and places them back in the middle of the action. I'm excited to discover a form factor right for making a real difference in their performance, and in the end in the performance of the IT services they plan, deliver, operate, and manage. And I'm delighted to see the soul of the service management movement in evidence in the MOF 4.0 community website. Microsoft recognizes that customers and partners have developed great ideas and best practices, and these have been reflected in the development of MOF 4.0. I applaud Microsoft for

its forward thinking, and I encourage you not only to use this book, but to contribute to the MOF community and benefit from the contribution of others.

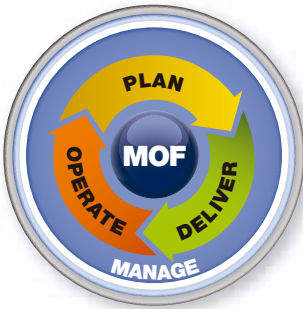


David Pultorak

Founder and Chairman

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1. MOF 4.0 Overview and FAQ



Introduction to MOF 4.0

First released in 1999, Microsoft® Operations Framework (MOF) is Microsoft's structured approach to helping its customers achieve operational excellence across the entire IT service lifecycle.

Microsoft is known for offering enterprise-class server platforms and products, including Windows Server®, Exchange Server® and SQL Server®, but technology alone isn't enough—to meet the tough challenges facing IT, organizations increasingly require guidance structured within a management framework. MOF was originally created to give IT professionals the knowledge and processes required to align their work in managing these platforms cost-effectively and to achieve high reliability, availability, and security. Microsoft created MOF to provide this guidance.

Since the first version of MOF was written, demands on IT have changed. Organizations are now faced with

- Increasing IT's business value.
- Responding to regulatory requirements.
- Increased demand to do more with less.

This newest version, MOF 4.0, was built to respond to these challenges.

Goal of MOF 4.0

The guidance in MOF is intended to help organizations create, operate, and support IT services while ensuring that the investment in IT delivers expected business value at an acceptable level of risk.

Using MOF can help organizations create an environment where IT and the business work together toward operational maturity—MOF 4.0 provides a proactive model that defines processes and standard procedures to promote efficiency and effectiveness. It gives organizations a logical approach to decision-making and to the planning, deployment, and support of IT services.

MOF 4.0 Frequently Asked Questions

What is new in MOF 4.0?

The guidance in MOF 4.0 has been structured for the IT pro. Often, the downside to using a management framework is the “knowing/doing gap”—the difficulty in equating abstract theories with the day-to-day activities IT pros perform. To address this, MOF 4.0 introduces a new structure for its service management functions (SMFs)—one that emphasizes outcomes, results, and roles in a format that’s easy to reference.

In addition, MOF 4.0 has been expanded and enhanced to:

- Reflect a single, comprehensive IT lifecycle.
- Integrate best practices from Microsoft Solutions Framework (MSF).
- Create clear accountabilities.
- Align IT with business needs and goals.
- Address governance, risk, policy, and compliance.

- Support ISO/IEC 20000, CoBiT and ITIL V3.
- Enhance continuous improvement through community involvement.

For reference on how MOF 4.0 has changed, you can refer to the MOF 3.0 – MOF 4.0 Comparison chart located at the end of this Pocket Guide.

How much effort will it take to implement MOF 4.0?

Your goal should be to solve problems and promote efficiency in your organization, not to “implement” MOF. You can use MOF to drive key decisions, create and manage key policies and risks, clearly define roles and accountabilities, and define and enact processes for your organization—all in an efficient and practical manner. Because the scope of any problem or opportunity will determine the amount of effort required, MOF 4.0 has been designed to help overburdened IT professionals quickly access useful, relevant content. It contains practical guidance for everyday tasks and activities—not just theory—to efficiently and effectively address those problems. Its streamlined approach makes it possible for users to either implement the entire framework or simply use one component of the framework to solve a particular problem.

How is MOF 4.0 structured, and why?

The guidance in MOF consists of a series of phase overviews and SMFs. These describe the activities necessary for successful IT service management—from the assessment that launches a new or improved service, through the process of optimizing an existing service, all the way to the retirement of an outdated service.

The guidance has been written to meet the needs of three audiences: Corporate Information Officers (CIOs), IT managers, and IT professionals.

- Overview guides are directed toward CIOs, who need to see the big picture.
- Overview and workflow information in function-specific guides is geared toward IT managers who need to understand IT service strategies.
- Activities in function-specific guides are meant for the IT professionals who implement MOF in their day-to-day activities.

How does the content structure support ease of use and practical application?

The SMFs are anchored by pertinent questions, inputs, outputs, and best practices for each activity, and tables provide a format that's concise and easy to follow. The questions help drive decisions that are relevant for your organization. By answering the questions, you help determine where to focus (or not), which supports organizational maturation.

How does MOF address governance, risk, and compliance?

Governance, risk, and compliance are addressed in the Manage Layer, which is the foundation for the phases (Plan, Deliver, and Operate). Governance identifies the decision makers and stakeholders, determines accountability for actions and responsibilities for outcomes, and addresses how expected performance will be evaluated. Risk management occurs throughout the entire IT lifecycle as well; it addresses business decisions, policy adherence, application development, and operational procedures. Risk also determines what business controls need to be in place. Compliance guides behavior throughout the lifecycle to ensure that governance and risk management activities are addressed. The management reviews in each phase show how IT is performing against corporate governance, risk, and compliance objectives.

How can I learn more and share ideas?

A central component of MOF 4.0 is its online community—a place where IT professionals can share service management knowledge and best practices, communicating both with each other and with Microsoft. MOF 4.0 provides a platform that integrates contribution sharing, blogs, forums, online training, and feedback to support the community and keep it ahead of ever-shifting IT trends. To visit MOF online, go to www.microsoft.com/mof.

Will MOF 4.0 work with the framework I'm currently using?

MOF 4.0 is backward-compatible with all previous versions of MOF, and can easily integrate policies, tasks, or activities based on other frameworks. MOF 4.0 was designed to provide you with a clear picture of how the entire IT lifecycle is interrelated, what decisions are required, and what outcomes are vital, yet leaves it up to the IT organization to determine the areas of focus. An organization or IT professional can use all of MOF 4.0 or just one component of the framework to solve a particular problem.

Does MOF 4.0 align with other IT frameworks?

MOF 4.0 aligns with ISO/IEC 20000, ITIL, and CoBiT, which are well-known service management tools. Guidance that takes a theoretical, high-level approach often leaves the reader at a loss about its application; MOF 4.0 contains fundamental IT service management guidance, but takes a more streamlined approach to meet the needs of the IT pro.

ITIL®

There are many similarities between MOF and ITIL®. ITIL® V3 defines the top-level processes and functions that constitute best practices in IT management and the service lifecycle. ITIL® V3 is a vast compendium of information that addresses the breadth

of IT activities throughout its more than 1300 pages of concepts and models. MOF streamlines the IT service lifecycle approach by using common terms and delivering the guidance in a concise and meaningful way.

CoBiT

CoBiT is an auditing tool developed by industry professionals responsible for ensuring that organizations are meeting certain regulatory requirements. CoBiT addresses policies from regulatory bodies such as the Securities and Exchange Commission (SEC), the European Union (EU), the Health Insurance Portability and Accountability Act (HIPAA), the Data Protection Act, Basel I/II, and Sarbanes Oxley (SOX). MOF identifies the accepted set of controls for IT professionals who have to implement, execute, follow, or report IT policies and navigate risks every day. MOF 4.0 includes policy creation in the Plan Phase as well as support for IT governance, risk management, and compliance throughout the entire IT service lifecycle. Risk management and internal controls provide a coherent focus throughout the lifecycle and demonstrate the interconnectedness of all IT activities.

ISO/IEC 20000

ISO/IEC 20000 is an IT service management process standard created by the International Organization for Standardization. To receive ISO certification, businesses must meet certain goals and objectives set forth by the organization. MOF 4.0 identifies clear outcomes and measures for each process within the IT service lifecycle; its guidance helps businesses streamline their decision making and identify best practices for effective service management.

Figure 1-1 shows the relationship between MOF and other industry standards, as well as how Microsoft uses community input and best

practices to align its solution and platform strategy to support these standards.

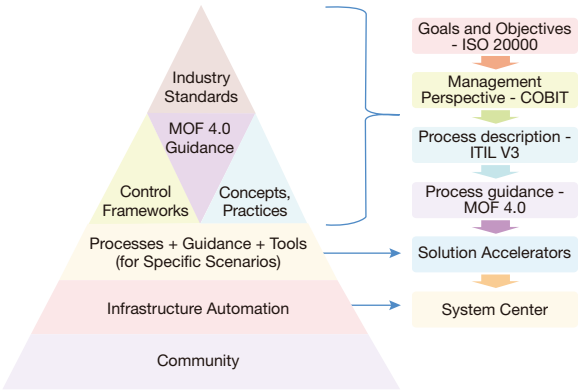


Figure 1-1. The relationship between MOF and other industry standards

2. MOF 4.0 at a Glance

How MOF 4.0 is Structured

The guidance in MOF 4.0 consists of a series of phase overviews and service management function (SMF) guides. These describe the activities that need to occur for successful IT service management—from the assessment that launches a new or improved service, through the process of optimizing an existing service, all the way to the retirement of an outdated service.

The guidance is written for a number of audiences—Chief Information Officers (CIOs), IT managers, and IT professionals:

- Overview guides are directed toward CIOs, who need to see the big picture.
- Overview and workflow information in function-specific guides is geared toward IT managers, who need to understand the IT service strategies.
- Activities in function-specific guides are meant for the IT professionals, who implement MOF within their work.

The MOF 4.0 guidance is available on Microsoft TechNet at <http://www.microsoft.com/technet/solutionaccelerators/cits/mo/mof/default.aspx>.

The IT Service Lifecycle

The IT service lifecycle describes the life of an IT service, from planning and optimizing the IT service to align with the business strategy, through the design and delivery of the IT service, to its ongoing operation and support. Underlying all of this is a foundation of IT governance, risk management, compliance, team organization, and change management.

The Lifecycle Phases

The IT service lifecycle is composed of three ongoing phases and one foundational layer that operates throughout all of the other phases. They are:

- The Plan Phase.
- The Deliver Phase.
- The Operate Phase.
- The Manage Layer.

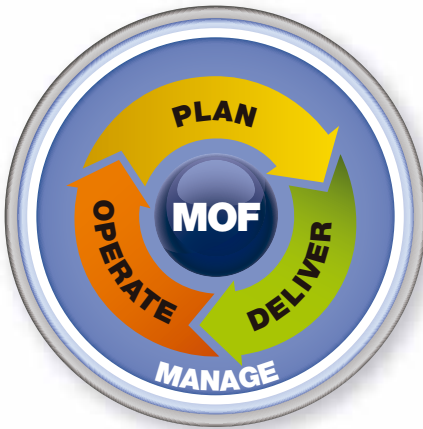


Figure 2-1. The IT service lifecycle

Your IT organization is probably managing many services at any given time, and these services may be in different phases of the IT service lifecycle. Therefore, you will get the most benefit from

MOF if you have a basic understanding about how all phases of the lifecycle operate and how they work together.

- The Plan Phase is generally the preliminary phase. The goal of this phase is to plan and optimize an IT service strategy in order to support business goals and objectives.
- The Deliver Phase comes next. The goal of this phase is to ensure that IT services are developed effectively, are deployed successfully, and are ready for Operations.
- Next is the Operate Phase. The goal of this phase is to ensure that IT services are operated, maintained, and supported in a way that meets business needs and expectations.
- The Manage Layer is the foundation of the IT service lifecycle. Its goal is to provide operating principles and best practices to ensure that the investment in IT delivers expected business value at an acceptable level of risk. This phase is concerned with IT governance, risk, compliance, roles and responsibilities, change management, and configuration. Processes in this phase take place during all phases of the lifecycle.

Following the guidelines contained in MOF 4.0 can help:

- Decrease risks through better coordination between teams.
- Recognize compliance implications when policies are reviewed.
- Anticipate and mitigate reliability impacts.
- Discover possible integration issues prior to production.
- Prevent performance issues by anticipating thresholds.
- Effectively adapt to new business needs.

Service Management Functions within the Phases

Each phase of the IT service lifecycle contains service management functions (SMFs) that define and structure the processes, people, and activities required to align IT services to the requirements

of the business. The SMFs are grouped together in phases that mirror the IT service lifecycle. Each SMF is anchored within a lifecycle phase and contains a unique set of goals and outcomes supporting the objectives of that phase. An IT service's readiness to move from one phase to the next is confirmed by management reviews (MRs), which ensure that goals are being achieved in an appropriate fashion and that IT's goals are aligned with the goals of the organization.

Figure 2-2 shows the IT service lifecycle phases, the SMFs, and the management reviews within each phase.

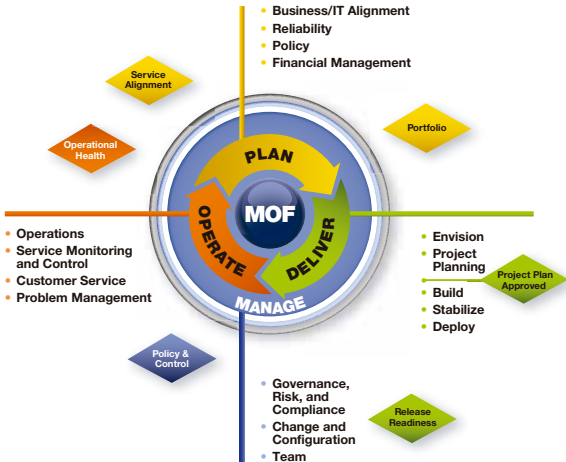


Figure 2-2. The IT service lifecycle phases and SMFs

Although each SMF can be thought of as a stand-alone set of processes, it is important to understand how the SMFs in all of the phases work to ensure that service delivery is at the desired quality and risk level. In some phases (such as Deliver), the SMFs are performed sequentially, while in other phases (such as Operate), the SMFs may be performed simultaneously to create the outputs for the phase.

Management Reviews (MRs)

For each phase in the lifecycle, MRs serve to bring together information and people to determine the status of IT services and to establish readiness to move forward in the lifecycle. MRs are internal controls that provide management validation checks, ensuring that goals are being achieved in an appropriate fashion, and that business value is considered throughout the IT service lifecycle. The goals of management reviews, no matter where they happen in the lifecycle, are straightforward:

- Provide management oversight and guidance.
- Act as internal controls at the phase level of the IT lifecycle.
- Assess the state of activities and prevent premature advancement into the next phases.
- Capture organizational learning.
- Improve processes.

The MRs, their locations in the IT service lifecycle, and their inputs and outputs are shown in the following table.

Table 2-1. MOF Management Reviews

MR	Owned by Phase	Inputs	Outputs
Service Alignment	Plan	<ul style="list-style-type: none"> • Results of the Operational Health Review • Service Level Agreements (SLA) • Customer input 	<ul style="list-style-type: none"> • Opportunity for a new or improved project • Request for changes to SLA
Portfolio	Plan	<ul style="list-style-type: none"> • Project proposals 	<ul style="list-style-type: none"> • Formation of a team • Initial project charter
Project Plan Approved	Deliver	<ul style="list-style-type: none"> • Business requirements • Vision statement 	<ul style="list-style-type: none"> • Formation of the project team • Approved project plan
Release Readiness	Deliver	<ul style="list-style-type: none"> • Documentation showing that the release meets requirements • Documentation showing that the release is stable • Documentation showing that the release is ready for operations 	<ul style="list-style-type: none"> • Go/no go decision about release
Operational Health	Operate	<ul style="list-style-type: none"> • Operating level agreement (OLA) documents • OLA performance reports • Operational guides and service-solution specifications 	<ul style="list-style-type: none"> • Request for changes to the OLA documents • Request for changes to the IT services • Configuration changes to underlying technology components

The Elements of SMFs

The content architecture in MOF 4.0 is designed so that an organization can quickly and efficiently apply the concepts, best practices and ideas to their organization. You can use a “start anywhere, go everywhere” approach—simply choose a particular outcome, role, goal, or process as a starting point. Each of these elements is an interrelated part of a whole picture that makes up the performance of your organization. The key is to identify the elements that are most likely to require attention, and then to identify actions related to those elements that solve the problems and leverage the opportunities that have the highest positive impact on the business. The following table describes the elements of the MOF 4.0 SMFs and how to apply them. (This information applies to the original MOF 4.0 documentation, not the information in this pocket guide.)

Table 2-2. SMF Elements

SMF Element	How to Apply
Why use this SMF and overview?	Describes the SMF and identifies scenarios for use. Use this section to ensure that the organization has a common understanding of the meaning and context of the SMF within its lifecycle phase.
Role Types	Use this to identify the appropriate accountabilities and assign ownership to ensure that the right work gets done. Each accountability maps to one or more of the MOF service management functions that describe the processes and activities that make up the work of IT pros throughout the IT service lifecycle.
Goals	The goals identify specific outcomes and measures an organization should achieve if they are applying the SMF in their scenario—use the goals to create a common focus and a concrete set of measurements for your organization.

SMF Element	How to Apply
Outcomes	There are outcomes identified for each set of goals. Use the outcomes as a basis for measuring success—this is a starting point for determining what metrics are most relevant and useful to managing your work.
Key Terms	Four to eight applicable key terms are identified in the beginning of each SMF. Use the key terms to start a conversation with your team, and make sure to reconcile any differences in understanding—this will ensure that everyone has a common language with which to align their work.
Processes	Each SMF has three to six key processes. Combine the processes with the role types to ensure the right activities are in place and someone is accountable for the outcomes.
Activity Tables	<p>Each SMF process has one to six key activities. The activities are described in tables. Each activity identifies key questions, inputs, outputs and best practices.</p> <ul style="list-style-type: none"> • Answer the questions to drive the right decisions in your organization • Identify the correct inputs to make the activity both efficient and understood • Produce the correct outputs to ensure predictability and completions of the right elements so they can be handed off to other dependent processes. • Follow the correct best practices to see a faster road to success, better cultural adoption, and greater effectiveness.