Microsoft®

Microsoft Solutions for Security

Delivering the Windows Server 2003 Security Guide

patterns & practices
proven practices for predictable results

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Introduction

This guide provides general information intended for business planners, information technology (IT) architects or project managers regarding the Microsoft recommended best practices for coordinating and implementing this solution. This guide also includes pointers to a variety of resources including:

- Microsoft Solution Framework (MSF)
- Microsoft Operations Framework (MOF)
- Microsoft Security Risk Management Discipline (SRMD)
- Sources for prerequisite knowledge and training on the topics essential to this solution
- Descriptions of the tools and resources provided with this guidance are designed to assist you in planning, scheduling and managing your implementation

Microsoft Solution Framework

The Microsoft Solutions Framework (MSF) provides proven practices for planning, building, and deploying a variety of technology solutions. MSF combines best practices of software design and development together with building and deploying infrastructure into a single project lifecycle for guiding technology solutions of all kinds. MSF helps organizations to achieve a delicate balance of flexibility while meeting commitments and minimizing risk. Microsoft also provides a wealth of MSF-specific resources for customers to download from its Web site at http://www.microsoft.com/MSF/.

The fundamental elements of MSF include:

- Readiness Management
- Project Management
- Risk Management
- Team Model
- Process Model

Readiness Management

At the beginning of a solution project, before the vision/scope phase, the organization needs to have a clear understanding of:

- The organization's specific security scenario and requirements:

  - To address the needs of organization's initiating security solution implementations, Microsoft Solutions for Security (MSS) has created the Security Risk Management Discipline (SRMD). The SRMD is a detailed process used to determine which threats and vulnerabilities have the most potential impact on a particular organization. Because every company has different business requirements, it is impossible to create one list of vulnerabilities that will have the same impact on every environment, so SRMD enables an organization to incrementally build its security and identify potential areas requiring attention in the future.

- The organization's internal competencies:

  - This solution is intended to be easily understood and readily implemented by a Microsoft Certified Systems Engineer (MCSE) with two years of experience, and at least basic familiarity with the following Microsoft Official Curriculum (MOC) course materials:

    - **MOC Course 2810**–Fundamentals of Network Security
    - **MOC Course 2830**–Designing Security for Microsoft Networks
    - **MOC Course 2150**–Designing a Secure Microsoft Windows 2000 Network
    - **MOC Course 2153**–Implementing a Microsoft Windows 2000 Network Infrastructure

Project Management

MSF provides a large and diverse body of materials to assist organizations with application development, infrastructure deployment, and project management. This solution uses a subset of these MSF tools and methodologies to derive a number of project management tools intended to assist Business Planners or IT Architects implement this solution, including:

- A sample Microsoft Project schedule, named Windows Server 2003 Security Guide Implementation Project Schedule.mpp, which details some of the tasks, time requirements and resources, is included in the Tools and Templates\Delivery Guide folder provided with this solution.

- A sample Vision/Scope document, named Windows Server 2003 Security Guide Implementation Vision/Scope.doc, has been created to expedite the process of a security project focused on the Windows Server 2003 Security Guide.

- A sample Functional Specification, named Windows Server 2003 Security Guide Implementation Functional Specification.doc, has been created to define the functionality of the security project focused on the *Windows Server 2003 Security Guide*. This functional specification will be combined with several spreadsheets that accompany the Windows Server 2003 Security Guide Tools and Templates.

Risk Management

An essential element of project management is controlling the inherent risks of a project. Most individuals associate the concept of risk with the potential for loss, including value, control, functionality, quality, or time. However, risks also arise from the uncertainty surrounding project decisions and their outcomes, which can result in a failure to maximize opportunity gain.

MSF advocates the aggressive management of risks by planning mitigation strategies and contingency plans well in advance of these risks becoming actual issues or blocking factors to success.

Team Model

MSF provides both a framework for separating the roles and responsibilities of application development and infrastructure deployment initiatives, and tools for defining these roles and their interactions.

- **Program Management**—Manages the project specification and serves as primary architect; maintains the project schedule and reports project status; drives assessment and management of risks; facilitates negotiation within the team; coordinates the feature versus schedule versus resources tradeoff decision–making.

- **Product Management**—Acts as the customer advocate and manages customer requirements; drives the shared vision/scope of the project; develops and maintains the business case; drives feature versus schedule versus resource tradeoff decisions.

- **Development**—Specifies the features of the solution design; estimates time and effort required to complete each feature; builds or supervises the building of the solution.

- **Test**—Verifies the solution functionality and ensures that all known issues are documented.
- **User Experience**—Acts as user advocate; manages user requirements; drives usability and performance enhancement tradeoff decisions; develops and provides user training.
- **Release Management**—Acts as advocate for operations, support, and delivery channels; manages procurement; coordinates solution deployment; drives manageability and supportability tradeoff decisions.

Process Model

The process model is the major element of MSF, representing best practices that have been identified, used, and refined by Microsoft from its own experiences coordinating large-scale application development and infrastructure deployment projects. The primary concepts of the MSF process model include:

- **Managing tradeoffs**—A balance must exist between resources (people and money), schedule (time), and features (scope). Should one of these elements require change, the other items also must change in some manner.
- **Milestone driven approach**—Milestones are a key theme in MSF. Milestones are used to plan and monitor project progress, and serve as intermediary points in the project. They are used to gauge progress, ensure synchronization with customer expectations, coordinate with other team members on deliverables, and check in with stakeholders or sponsors regarding progress and direction.
- **Iterative approach**—MSF recommends that solutions are developed by building, testing, and deploying a core of functionality first, then adding sets of features regularly. It relies upon "living" documents, which are regularly refreshed as new feature sets are added. It relies upon using daily builds of the solution, frequently gauging progress, and ongoing tracking and control of project artifacts.
- **Regular phases and milestones**—A wide variety of valuable project tools and templates are available online from MSF for each of these project phases including:
  - **Envisioning Phase**
    - Vision/scope template
    - Project structure template
    - Risk assessment tool and management tools
  - **Planning Phase**
    - Business, User, System and other requirements templates
    - Functional Specification templates
    - Development, Risk Management, Test, Training, Quality and other Plan templates
  - **Building Phase**
    - Templates for content and code deliverables
    - Test plan and test case templates, although detailed Test Plan and Cases are included with the Test Guide of this solution
  - **Deploying Phase**
    - Deployment and Communication plan templates

MSF is closely related to the Microsoft Operations Framework (MOF), which is the Microsoft approach to achieving mission−critical production system reliability, availability and manageability. MOF is based on an internationally accepted set of best practices in IT service management called the IT Infrastructure Library (ITIL). MSF and MOF have been designed to work effectively either together, or independently.

Microsoft Operations Framework

MOF provides technical guidance that enables organizations to achieve mission–critical system reliability, availability, supportability, and manageability of Microsoft products and technologies. The Operations Guide for this guidance is based on MOF, and it outlines the appropriate tasks necessary for Operating, Supporting, Optimizing and Changing this guidance.

MOF provides valuable operational guidance in the form of white papers, operations guides, assessment tools, best practices, case studies, templates, support tools, and services. This guidance may help you address the people, process, technology, and management issues pertaining to operations within complex, distributed, heterogeneous IT environments.

Tools and Templates

This set of guidance includes a number of tools and templates, which may be used to assist in the testing and deployment of the *Windows Server 2003 Security Guide* in most customer environments. The illustration below details the stages in the deployment process where certain tools or security templates were intended to be used.
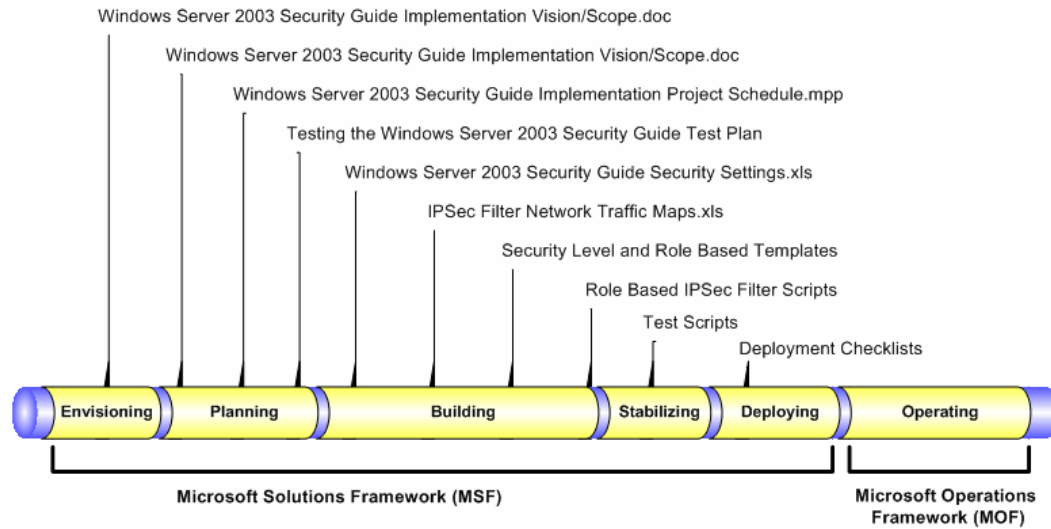

Figure 1.1
Tools and templates usage