## Privileged Access Workstation

Statement of Work

Prepared for

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This **‘Privileged Access Workstation’** Statement of Work (SOW) and any exhibits, appendices, schedules, and attachments to it are made with accordance to the Master SOW (Modern Workplace for Spin-Off). Each chapter in the Master SOW applies to this document.

## Introduction

, like many organizations in both the commercial and government sectors, faces an increasingly challenging cyberthreat environment. Attackers have become sophisticated in both attack methodologies and in navigating business and social structures to obtain the information that they are seeking. These modern cyber attackers are adept at rapidly gaining administrative access to computing environments. These attacks are difficult to identify, and they often result in remote malicious actors gaining unfettered access to most or all of an organization’s electronic documents, including emails, reports, presentations, customer data, and other intellectual property. These attackers sometimes also target an organization as a relay point to attack customers, suppliers, employees, or trusted business partners of that organization.

Protecting against these attacks is a key priority for .

The Microsoft Services Privileged Access Workstation (PAW) Offer addresses the need for highly secured workstations for the administration of enterprise services, data, and applications. Using PAW is a first step toward improving security posture. PAWs can help protect privileged accounts and help reduce the risk of credential theft, lateral movement, and elevation of privileges.

The implementation of PAW should be performed together with other mitigations, such as drastically reducing the number of domain and enterprise administrative accounts, removing application services accounts from Domain Admins groups, and domain controller hardening, that can help a company defend against credential theft attacks.

# Project Objectives and Scope

This chapter details the project objectives and scope.

### Objectives

A PAW is a hardened and locked-down workstation that is designed to help safeguard sensitive accounts and their tasks. PAWs are recommended for the administration of identity systems, application servers, cloud services, private cloud fabric, and sensitive business functions.

The objective of the project is to design and implement PAWs with applications for the following administrative tasks, which are based on Microsoft-recommended practices, architectures, accumulated field experience, and requirements such as:

* + - Active Directory Domain Services (ADDS) management.
    - Administrative tasks using Microsoft System Center suite management tools.
    - Microsoft SQL Server management.
    - Microsoft Exchange Server management.

PAW uses the latest version of Windows 10 Enterprise and security functions such as:

* + - Windows Bitlocker Drive Encryption [Trusted Platform Module (TPM) required].
    - Microsoft Windows Credential Guard (TPM required).
    - Microsoft Enhanced Mitigation Experience Toolkit (EMET).
    - Integration with Microsoft Operations Management Suite (OMS).

Basic administrative tools, such as the following, will be included in the workstation image:

* + - Microsoft Remote Server Administration Tools (RSAT).
    - Windows PowerShell.
    - Microsoft Azure PowerShell module.
    - System Center management consoles.

### Areas Within Scope

This section details the areas that are within scope.

### General Project Scope

Microsoft will support the customer with the following services:

Table 1: Services in Scope

|  |  |  |  |
| --- | --- | --- | --- |
| Solution  Component | In-Scope Feature | Description and  Considerations | Scope Assumptions |
| PAW kickoff and solution workshop | Up to 1 day of envisioning workshops | A 1-day workshop that kicks off the project, captures specific customer environment information, and defines major design  decisions. | The vision and scope of the project will be documented as part of the architecture and design document. |
| PAW design | * An update of the architecture and design document * Build a clean deployment   computer | Adapt the PAW reference architecture to fit the environment. |  |
| PAW  administrative workstation image | Configuration of a single workstation image | * One administrative workstation image for Windows 10 Enterprise x64 will be prepared through the use of the Microsoft Deployment Toolkit (MDT). * This image is designed for 1 specific administrative   application. | * One image is in scope. * More images for additional administrative tasks can be added as cost options to this project. |
| Administrative workstation deployment | Deployment of up to 5 Privileged Access Workstations | The Privileged Access Workstations will be deployed (The deployment will be based on the workstation  image). | The customer will have the workstation hardware ready for deployment. |
| AD DS | AD DS  configuration for PAW | Microsoft will help the customer deploy the organizational units (OUs) and group policy objects (GPOs) and grant permissions for the PAW images in  production AD DS (1 domain). |  |
| Monitoring | OMS integration | This includes integration with OMS. |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Solution  Component | In-Scope Feature | Description and  Considerations | Scope Assumptions |
| System testing assistance | PAW solution item testing assistance rendered to (applies to items within the nonproduction build  environment) | * System testing focuses on the functionality meeting the design. * This is time-boxed to 2 days. | Testing assistance is constrained to the time allocated during this project. |
| Operational guidance | A document that contains recommended operational guidance and practices that can be used to maintain the security infrastructure and systems within the  PAW | This document will include practices and procedures that define service ownership functions and roles. |  |
| One deployment | Deployment of PAW (The  workstation will be deployed once in a physically secure room and will be tested in a simulated production AD DS. The same PAW implementation will then be used  in production.) | PAWs will be deployed in the physically secure room and connected to the simulated production AD DS. After testing is complete, the solution will be disconnected from the simulated AD DS, moved to the datacenter, and connected to the production AD DS. | Additional deployments (such as dedicated lab deployments and new production deployments) are available as add-ons (at additional cost). |
| Device Guard | Device Guard | Hardware-based Whitelisting along with Kernel-Mode and User-Mode Code Integrity (KMCI and UMCI) | The PAW hardware must be Windows 10 certified or have Windows 10 drivers that support Virtualization-based  security |
| PAW for cloud services management | Cloud PAW | PAW for CSM  The baseline scope for PAW for CSM includes 5 devices deployed on 1 supported | Administrative and support applications include PowerShell modules for: Azure compute, Azure AD, MSOnline, and Azure AD Privileged  Identity Management. |

|  |  |  |  |
| --- | --- | --- | --- |
| Solution  Component | In-Scope Feature | Description and  Considerations | Scope Assumptions |
|  |  | hardware type/model. Adjust the figures below if you want more devices or hardware models included.   * Deploy up to 5 PAW devices on 1 PAW hardware model including 1 workload * Configuration of devices using Windows Autopilot if applicable. * Configure Microsoft Intune compliance policies for PAW devices. * Configure Microsoft Intune configuration policies to harden PAW devices. * Configure Azure Multi Factor Authentication (MFA), self-service password reset, and Azure AD Conditional Access policies to support PAW scenarios. * Configure Azure AD Identity Protection to allow Conditional Access to use Identity Protection Sign-in Risk as part of Conditional Access policy rules. * Configure Windows Update for Business policies. * Configure Intune to deliver identified administrative and support applications for PAW devices. This activity is time-boxed to 16 hours of effort. * Configure the Windows Analytics workspace to be able to access device |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Solution  Component | In-Scope Feature | Description and  Considerations | Scope Assumptions |
|  |  | health, update readiness, and upgrade readiness dashboards.   * Microsoft will assist the Customer with the integration of 1 additional application / system to be managed from PAWs.   **Manage Office 365 services**   * Microsoft will help the Customer manage Office 365 services (Office Admin Portal, Exchange Online, SharePoint Online, Skype for Business Online, Microsoft Teams, etc.)   from PAW devices. |  |

The following optional components are out-of-scope and therefore not included in the general project scope:

Table 2: Optional Components and Features

|  |  |  |  |
| --- | --- | --- | --- |
| **Optional**  **Solution Component** | **Optional In-Scope Feature** | **Description and Considerations** | **Scope Assumptions** |
| LAB deployment | Dedicated LAB deployment and additional production deployment | With this option PAW is deployed 2 times. First in a LAB where PAW is tested against LAB or simulated production AD. After the PAW is tested, a new PAW is deployed for production environment and the  LAB deployment stays. |  |
| Remote Access Integration | Remote Access support for PAW workstations in production forest | This design will integrate Technologies’ current remote access software onto solution’s administrative desktop image | For security reasons, remote access to PAW workstations is not allowed. |
|  |  |  | Remote access software must:   * Be compatible with the   selected admin |

|  |  |  |  |
| --- | --- | --- | --- |
| **Optional**  **Solution Component** | **Optional In-Scope Feature** | **Description and Considerations** | **Scope Assumptions** |
|  |  |  | workstation operating system (Windows 10 Enterprise x64)   * Be able to operate concurrently with the native operating system IPsec capability, thereby not disabling it during installation or operation |
| SIEM | Integration with existing SIEM | Establish a data connection and define filters so that events from PAW monitoring can be collected in central SIEM  solution. |  |
| Device Guard | Device Guard | Hardware-based Whitelisting along with Kernel-Mode and User-Mode Code Integrity (KMCI and UMCI) | The PAW hardware must be Windows 10 certified or have Windows 10 drivers that support Virtualization-based security |
| AppLocker | AppLocker | Policy-based, fine-grained whitelisting for User-Mode applications. This can supplement  Device Guard or used on its own. |  |

### Software Products and Technologies

The following software and licenses are required for this implementation. It is Technologies’ responsibility to procure the described software and licenses.

**Important note:** unless otherwise agreed to in the work order, temporarily appoints Microsoft to act as its agent for the limited purpose of accepting and agreeing to the user terms of any click-through license agreement that accompanies the software (Microsoft or non-Microsoft) that is listed in this SOW or the work order and is included within the test and development environments. The customer can read these terms by clicking the **About** box in the toolbar ribbon for the specific product at [www.microsoft.com](http://www.microsoft.com/) or by requesting a copy from the Microsoft Engagement Manager.

Unless otherwise agreed to in writing in the work order, temporarily entitles Microsoft to act as its agent for the download of the required software. With this authority, Microsoft can apply the known-good media process to

download and validate the required software, and can compile the software into a specific disk image structure that can be used to build an MDT server.

Table 3: Software Products (Paid Licenses)

|  |  |
| --- | --- |
| **Operating Systems and Server Applications**  **(Paid Licenses)** | **Provided By** |
| Windows Server 20 2016 or higher |  |
| Windows 10 Enterprise x64 (version 1607 feature update, build 1607) or higher |  |

The following software packages will be required for the solution and are available as Internet downloads at no cost. Microsoft will provide a text file with packages, versions, and their respective download locations. A script will be provided to help download the required files.

Table 4: Software Products (Downloads)

|  |  |
| --- | --- |
| **Name** | **Provided Through** |
| Microsoft BgInfo (from the Sysinternals Suite) | Scripted download |
| Microsoft Assessment and Deployment Kit | Scripted download |
| Windows Management Framework | Scripted download |
| Microsoft Report Viewer | Scripted download |
| MDT | Scripted download |
| Microsoft .NET Framework | Scripted download |
| Microsoft Attack Surface Analyzer | Scripted download |
| EMET | Scripted download |
| Microsoft Network Monitor | Scripted download |
| Microsoft Message Analyzer | Scripted download |
| RSAT for Windows | Scripted download |
| Microsoft LAPS | Scripted download |
| TCPView for Windows (from the Sysinternals Suite) | Scripted download |
| Microsoft Process Explorer (from the Sysinternals Suite) | Scripted download |
| Microsoft Process Monitor (from the Sysinternals Suite) | Scripted download |
| Microsoft PsTools (from the Sysinternals Suite) | Scripted download |
| Microsoft security baseline templates | Scripted download |
| Administrative templates for Windows 10 | Scripted download |

### Data Migration

Data migration is out of scope for this project.

### Integration and Interfaces

The PAW environment has the following interfaces in the environment.

Table 5: Interface Scope

|  |  |  |  |
| --- | --- | --- | --- |
| **Interface Name** | **Description** | **In Scope** | **Responsibility** |
| AD1 | AD DS membership | The PAWs will be member machines in the production forest. |  |
| AD2 | AD DS configuration | OUs, GPOs, and delegated permissions will be added to the  production AD DS service. |  |

### Environments

The following table provides information about the development and test facilities that are to be used by the project team members. For the following environments, will be responsible for allocating and setting up the base hardware, network hardware, and network connectivity, and will provide the required software. The joint Microsoft and Vitesco Technologies team will install and configure the software products shown in Table 3 and Table 4 as described in Section 1.2.1 of this document.

Table 6: Required Environments

|  |  |  |  |
| --- | --- | --- | --- |
| **Environment** | **Location** | **Responsibility** | **Ready By** |
| Build | Dedicated secure room |  | Before the Build phase of this project |
| Production | Secure datacentre |  | Before the Deploy phase of this project |

### Training and Knowledge Transfer

Informal knowledge transfer will be provided throughout the project. Informal knowledge transfer is defined as informal information that is shared when staff works side by side with Microsoft staff. This could include whiteboard discussions, email threads, conference calls, and facilitated meetings regarding technical topics. Transfer activities are secondary to maintaining the project schedule.

### Areas Out of Scope

Any area that is not explicitly listed in Section 2.2 as within scope is out of scope for this engagement. The areas that are out of scope for this engagement include, but are not limited to, the following:

Table 7: Areas Out of Scope

|  |  |
| --- | --- |
| **Out of Scope—Component or Feature** | **Description and Considerations** |
| Physical server setup, management, and maintenance | * Physical server setup, installation, and networking interfaces or evaluation of new hardware or software. |

|  |  |
| --- | --- |
| **Out of Scope—Component or Feature** | **Description and Considerations** |
|  | * Ongoing production operational support. |
| PAW enterprise functions | Windows 10 Enterprise functionalities such as AppLocker, Internet Protocol Security (IPsec), smart card logon, and Windows Device Guard (unless they are added as options to this engagement). |
| Remote access for PAWs | Integration of the customer’s virtual private network  solution (unless added as an option to this engagement). |
| Discovery | Discovery and categorization of administrative tasks and applications. |
| Multiple domain or forest support | Support for more than one domain or forest. This project focuses on implementing 1 domain in the core production forest. It will not provide a model for the management of other domains or forests. However, the PAWs built by this project can be used to administer  other forests in the future. |
| Role definition | Custom definition of roles and the creation of new accounts or roles (such as groups). |
| Hardware | Hardware. is responsible for  acquiring the hardware required as a result of work order. |
| Server and client licenses | Procurement of required server licenses or client access licenses, including external connectors. |
| OMS configuration | Configuration of OMS dashboards, reports, or similar items beyond connecting the PAWs to an OMS  workspace. |
| Networking services | Setup or configuration of network load-balancing servers or services, including more secure reverse proxy publishing mechanisms. |
| Operations | Operational assessments, improvement plans, or designs for new operational processes or procedures beyond the documented guidance as delivered within the operations  guide. |
| Current production environment | Changes to the current environment to resolve issues that are not related to the defined scope of this project. |
| Third-party software support | Integration or support of Technologies’ third-party  software. |
| Monitoring services | Setup or configuration of monitoring, auditing, or alerting services to monitor the health of the environment beyond any items that are explicitly included in the scope. |
| Migration or consolidation | Migration, consolidation, or rationalization of AD DS objects, including users, groups, workstations, servers, applications, or group policies—this includes logon scripts and data migration. |
| Formal training | Formal classroom or hands-on lab training. |
| Test environment | * Building of a test environment. * Duplication of ’s existing Windows corporate domain environment within a test |

|  |  |
| --- | --- |
| **Out of Scope—Component or Feature** | **Description and Considerations** |
|  | lab or the creation of Technologies’ test domains to simulate production domains.   * Running of test cases. |
| Support | Post deployment support. Additional support can be purchased separately. |
| System runbooks and playbooks | Preparation of system runbooks and playbooks. |
| Older operating systems | Support for PAWs through the use of operating system  versions or image configurations other than those included in the project scope. |
| General production domain hardening | Securing of AD DS components other than privileged user  accounts. General hardening of servers such as domain controllers is out of scope. |

# Project Approach and Timeline

This chapter details the PAW project approach.

### Approach

Microsoft Services will make use of the Microsoft Solutions Framework (MSF) to implement this project. The project will be managed in structured phases by using phase-gate milestones. This project will include the following phases:

* + - Envision
    - Plan
    - Build
    - Stabilize
    - Deploy

The subsequent sections outline project activities

### Envision Phase

During the Envision phase, Microsoft will support to gather information about the current environment and to establish project technical requirements, goals, critical success factors, and constraints.

The team will kick the project off by coordinating a series of envisioning working sessions with key stakeholders to verify requirements and gather data about the existing environment.

Microsoft will then create a project vision and scope section in the architecture and design document that will serve as the project’s charter, align expectations among the project team and stakeholders, and document the requirements.

#### Envision: Key Microsoft Activities

Microsoft support the customer with the following activities:

Table 8: Envision Phase Key Microsoft Activities

|  |  |  |
| --- | --- | --- |
| **Activity** | **Covering** | **Description** |
| Workshop | Team members, objectives, and delivery framework | This project kickoff meeting includes information about the customer’s current state, requirements, and  end-state objectives. |
| Design sessions | Conceptual architecture discussions with architects and stakeholders | The Microsoft and team will review the solution elements and features of the solution components in Table 1: Services in Scope*.* |

|  |  |  |
| --- | --- | --- |
| **Activity** | **Covering** | **Description** |
| Document | Project plan with key milestones | This is a preliminary, high-level project plan with key milestones. |

#### Envision: Key Customer Activities

Table 9: Envision Phase Key Activities

|  |
| --- |
| **Activity** |
| Gather information that might be requested during the Envision workshop. |
| Review the vision and scope document |
| Work with Microsoft to identify project team members. |
| Make decisions when architectural options are presented. |
| Engage operations and service owners to help raise awareness about systems to be implemented. |
| Process change management approvals as required. |
| Develop the communication plan. |

#### Envision: Key Documents

Table 10: Envision Phase key documents

Draft the project plan and plan milestones.

**Key Document**

#### Envision: Customer Work Products ()

Table 11: Envision Phase Customer Work Products ()

|  |
| --- |
| **Customer Work Products ()** |
| Information as requested |
| Decisions |
| Change management approvals |
| Communication plan |

#### Envision: Key Phase Assumptions

Table 12: Envision Phase Key Assumptions

|  |
| --- |
| **Key Phase Assumptions** |
| service owners and architects have been identified and can attend and participate in the PAW envisioning workshop. |
| Current configuration and data descriptions are available. |
| Functional requirements have been documented. |

### Plan Phase

During the Plan phase, Microsoft will support to develop and meet the technical and functional requirements in the logical and physical designs, and to define and

describe the environment end state. Microsoft will support to record the PAW design in the architecture and design document. The project plan will be updated to reflect the detailed timeline for the Build, Stabilize, and Deploy phases.

#### Plan: Key Microsoft Activities

Microsoft support the customer with the following activities:

Table 13: Plan Phase Key Microsoft Activities

|  |  |  |
| --- | --- | --- |
| **Activity** | **Covering** | **Description** |
| Document | The recording of the design in the architecture and design document | This document contains a description of the solution and its components, logical solution, and physical implementation. |
| Review | A review of the architecture and design  document | This activity consists of confirming the functional design and description as outlined in this document. |
| Review | A review of the project plan | This activity includes reviewing and updating the project plan to reflect customer-specific dependencies and logistical constraints for the Build, Stabilize, and Deploy phases. |

#### Plan: Key Customer Activities

Table 14: Plan Phase Key Activities

|  |
| --- |
| **Activity** |
| Gather information that might be requested during the Planning design sessions. |
| Review the architecture and design document and participate in its approval. |
| subject matter experts (SMEs) will participate in the design sessions and make decisions when architectural options are presented. |

#### Plan: Key documents

Table 15: Plan Phase Key documents

Architecture and design document

**Key documents**

#### Plan: Customer Work Products ()

Table 16: Plan Phase Customer Work Products ()

|  |
| --- |
| **Customer Work Products ()** |
| Information as requested |
| Decisions |
| Change management approvals |

#### Plan: Key Phase Assumptions

Table 17: Plan Phase Key Assumptions

|  |
| --- |
| **Key Phase Assumptions** |
| None |

### Build Phase

During the Build phase, Microsoft support the customer building the PAW solution components in a physically secure room. The goal of this phase is to help the team connect the PAW deployment to the simulated production Active Directory environment.

#### Build: Key Microsoft Activities

Microsoft support the customer with the following activities:

Table 18: Build Phase Key Microsoft Activities

|  |  |  |
| --- | --- | --- |
| **Activity** | **Covering** | **Description** |
| Build sessions | The PAW solution | This activity consists of:   * Implementing the PAW solution in the secure room. * Deploying a PAW image to 5 production   workstations that are attached to a simulated production AD DS. |
| Document | The test guide document | This work product describes the testing of PAW functionality but does not include -specific test cases. |
| Review | Review of the test guide |  |
| Document | Updates to the build process that are reflected in the implementation  guide | This document contains the configuration information necessary to build the end-state system that has been described in the architecture and design document. |
| Review | Review of the implementation guide document with | Confirm build definitions as represented in the architecture and design document |

#### Build: Key Customer Activities

Table 19: Build Phase Key Activities

|  |
| --- |
| **Activity** |
| Participate in Build activities. |

#### Build: Key documents and PAW deployment

Table 20: Build Phase Key documents and PAW deployment

|  |
| --- |
| **Key documents and PAW deployment** |
| A deployment of PAW that has been connected to a simulated production AD DS environment |
| Production of the implementation guide document |
| Production of the test guide |

#### Build: Customer Work Products ()

Table 21: Plan Phase Customer Work Products ()

|  |
| --- |
| **Customer Work Products ()** |
| Information as requested |
| Decisions |
| Change management approvals |

#### Build: Key Phase Assumptions

Table 22: Build Phase Key Assumptions

|  |
| --- |
| **Key Phase Assumptions** |
| SMEs will participate in the development sessions. |
| will provide appropriate secure room facilities, including hardware and software, to simulate production. |

### Stabilize Phase

During the Stabilize phase, the Microsoft supports implementing the test guide in the physically secure room, document the results for the test cases, and validate the Build process. Microsoft will support the customer to record the recommended operational practices and procedures in the operations guide.

The Stabilize phase ends when the solution has been verified through the implementation of the test guide.

#### Stabilize: Key Microsoft Activities

Microsoft support the customer with the following activities:

Table 23: Stabilize Phase Key Microsoft Activities

|  |  |  |
| --- | --- | --- |
| **Activity** | **Covering** | **Description** |
| Functional testing | * The running of test cases from the test guide * Documenting test results | It will take approximately 2 days to run the PAW test guide. |
| Document | An update to the operational procedures in the operations guide document | The document includes specific operational guidance for the systems and components that are described in the architecture and design  document. |
| Review | Review the operations guide with | Confirm operational practices and procedures are as documented |

#### Stabilize: Key Customer Activities

Table 24: Stabilize Phase Key Activities

|  |
| --- |
| **Activity** |
| Engage designated test users. |
| Perform system testing based on the test guide. |
| Review the implementation guide and participate in its approval. |
| Review the operations guide and participate in its approval. |

#### Stabilize: Key documents and test cases

Table 25: Stabilize Phase Key documents and test cases

|  |
| --- |
| **Key documents and test cases** |
| Completed PAW test cases |
| Completed operations guide document |

#### Stabilize: Customer Work Products ()

Table 26: Plan Phase Customer Work Products ()

|  |
| --- |
| **Customer Work Products ()** |
| Information as requested |
| Decisions |
| Change management approvals |
| Test result documentation (test results presented in test guide tables) |

#### Stabilize: Key Phase Assumptions

Table 27: Stabilize Phase Key Assumptions

|  |
| --- |
| **Key Phase Assumptions** |
| SMEs and test users are ready to participate in the testing activities. |
| will provide the lab facilities, including hardware and software, that are needed to conduct testing. |

A post deployment support process will be established by prior to commencement of the Deploy phase.

**Key Phase Assumptions**

### Deploy Phase

The Deploy phase begins with the implementation of the PAW solution for production use. The PAW deployment in the physically secure room will be disconnected from the simulated production Active Directory environment, and the PAWs will be moved to the datacenter and connected to the real production Active Directory environment.

users will, based on the operations guide, validate the solution functionality in the production environment. will have one day to validate the functionality of the new administrative workstations within their organization.

After the validation tests are completed, the production rollout begins. First, Vitesco Technologies administrators will use the solution to perform their daily work. During the rollout, these administrators will report problems that need to be addressed and will work with Microsoft to troubleshoot and resolve these problems.

#### Deploy: Key Microsoft Activities

Microsoft support the customer with the following activities:

Table 28: Deploy Phase Key Microsoft Activities

|  |  |  |
| --- | --- | --- |
| **Activity** | **Covering** | **Description** |
| Deploy sessions | Connecting PAW to the production environment | * During PAW production implementation, Microsoft will assist as needed as puts the implementation guide into effect. * Microsoft support activities are limited to the first 5   PAWs in the production forest. |
| Handover and closeout | The handover and closeout of project | * Microsoft will provide general assistance to staff during the handover and closeout. |

#### Deploy: Key Customer Activities

Table 29: Deploy Phase Key Activities

|  |
| --- |
| **Activity** |
| Deploy the solution to production. |
| Provide direction to the Microsoft resources during this project phase. |
| Run customer acceptance tests. |
| Provide feedback on production use. |
| Provide sign-off for project results. |

#### Deploy: Key PAW implementation support

Table 30: Deploy Phase Key PAW implementation support

PAW production implementation support

**Key PAW implementation support**

#### Deploy: Customer Work Products ()

Table 31: Plan Phase Customer Work Products ()

|  |
| --- |
| **Customer Work Products ()** |
| Information as requested |
| Decisions |
| Change management approvals |
| Written feedback on production functionality |
| Written sign-off on project results |

#### Deploy: Key Phase Assumptions

Table 32: Deploy Phase Key Assumptions

|  |
| --- |
| **Key Phase Assumptions** |
| will take responsibility for its change control processes. |
| Affected organizations will identify the resources and groups that will be required for the Deploy phase. |
| In performing our services under this SOW and the applicable work order for this project phase, we will rely upon any instructions, authorizations, approvals, or other information provided to us by  Project Manager or by any other personnel identified by your Project Manager. |
| The deployment process for 1 production domain and 5 PAWs will help the customer continue and finalize integration of additional PAWs, if necessary. |

### Timeline

It is estimated that this engagement will be performed in approximately two weeks and will include the phases noted. The actual timeline for this engagement will be relative to the project start date, and all dates and durations provided are estimates only.

A typical project schedule is depicted in the following table.

Table 33: Typical on-prem PAW project schedule (Cloud PAW excluded)

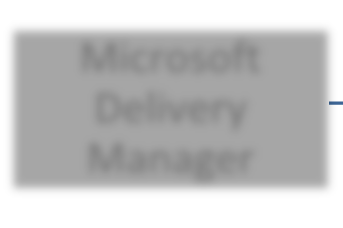
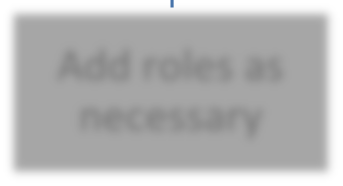
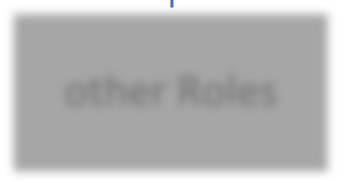
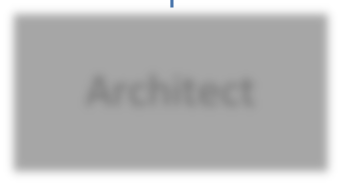
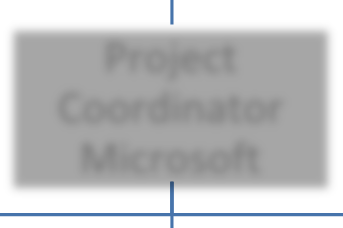
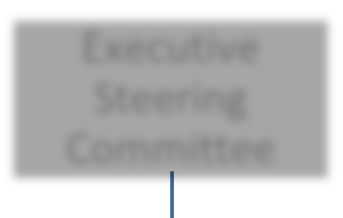
|  |  |
| --- | --- |
| **Day** | **Activity** |
| 1 | * Kickoff and Envisioning workshops * Documentation of results |
| 2-3 | * Updates to the architecture and design document * Preparing test environment * Building the MDT server |
| 4 | Adding drivers and customer tools to the MDT server (build disk image) |

|  |  |
| --- | --- |
| **Day** | **Activity** |
| 5-6 | Test image deployment to production machines with simulated AD DS |
| 7-9 | Move MDT to the production Active Directory environment and attach production PAWs to production AD DS |
| 10 | Documentation and quality assurance (QA) of that documentation  Project closeout presentation |

# Project Organization Structure

The Microsoft-Team will be staffed with consultants from Microsoft Consulting Services as well as consultants from Microsoft Partners depending on the technologies and products required in the project.

The project will be organized as depicted in the following diagram.



Microsoft

Delivery Manager

Project

Coordinator Microsoft

Architect

other Roles

Add roles as

necessary

Project team CUSTOMER

Projekt Manager CUSTOMER

Executive Steering Committee

Figure 1: Project Organization Structure

### Project Roles and Responsibilities

has the overall responsibility for the project and the project management. Microsoft supports the project with services and technical consulting.

The Services are provided in cooperation and in a joint team of Microsoft and .

#### Customer

This section provides a brief description of key project roles and responsibilities that have to be staffed by . It is required that customer’s team members have enough capacity, the right skills, and will be available as required to support the project and timelines.

Persons fulfilling the roles should be identified until the kick-off meeting.

|  |  |
| --- | --- |
| **Role** | **Responsibilities** |
| **Project sponsor** | Makes key project decisions, assists in escalating unresolved issues to the  Executive Steering Committee, and clears project roadblocks |
| **Project Manager** | * Primary point of contact for Microsoft team * Responsible for managing and coordinating the overall project * Responsible for resource allocation, risk management, project priorities, and communication to executive management * Manages day-to-day activities of the project * Coordinates the activities of the overall team (Customer, Microsoft, 3rd parties) according to the project schedule * Project scheduling of consultants von Microsoft at least 4 weeks in advance * Escalation management |
| **Technical Lead(s)** | Primary technical point of contact for the team who is responsible for technical architecture. |
| **Subject matter experts** | * Clarification of technical questions and requirements * Solving of open issues * Providing needed information’s |

#### Microsoft

This section provides a brief description of key project roles and responsibilities that will be staffed by Microsoft.

|  |  |
| --- | --- |
| **Role** | **Responsibilities** |
| **Architect(s)** | * Technical oversight and quality assurance for all service and consulting activities provided by Microsoft * Advises the team that Microsoft recommended practices are applied * Works with and supports the Architect(s) / technical lead(s) from the customer during solution design and architectural issues. |

|  |  |
| --- | --- |
| **Role** | **Responsibilities** |
| **Microsoft / Partner Consultants** | * Provide technical design leadership * Deliver workshops and sessions |