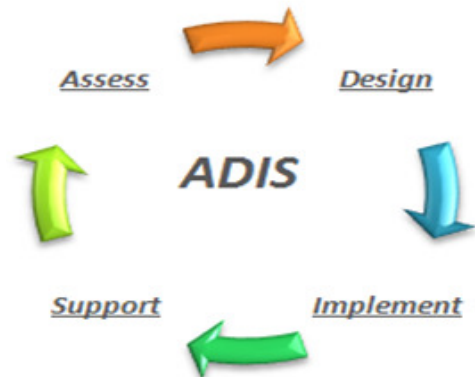


AM3 Technologies Virtualization Solutions

Evolve

AM3 Technologies' Evolve Service assists in the transformation of your physical environment into a virtual infrastructure. Our ITIL-based ADIS Virtualization Process ensures success for your virtualization initiative.



Assessing and Planning a Successful Virtualized Environment

Virtualization yields significant operational advantages, but it can also introduce new complexities and new management challenges. To reap the full benefits of virtualization, planning, assessment and implementation must be coordinated among server, storage, network, security, and application stakeholders. This coordination may require changing customized processes. Coworkers across your data center must bridge organizational boundaries to facilitate a productive planning and design phase for your virtualization implementation.

Coordinating Resources

The AM3 Technologies **evolve** Service helps you develop and deploy a data center-wide virtualization strategy that is customized to your IT and business needs. AM3 Technologies enterprise and solution architects, virtualization experts, and project managers work collaboratively with you to provide consulting services driven by your technical, business, and financial requirements. We also offer detailed total cost of ownership (TCO) and return on investment (ROI) analyses for server and desktop consolidation to help you quantify potential cost savings. By leveraging AM3 Technologies' years of experience and proven ADIS methodology we can recommend the right technology solutions for your particular challenges and provide end-to-end service delivery and task coordination to help you achieve a successful implementation.

A Collaborative Approach to Virtualization
Leveraging AM3 Technologies' virtualization expertise helps you create an end-to-end solution with many benefits.

- **Comprehensive approach:** Helps you protect application performance and facilitate automation
- **Simplified engagement model:** Provides a single point of contact throughout the services engagement
- **Industry-leading expertise:** Delivers recommendations based on AM3's combined best practices and experience
- **Support for business transformation:** Helps reduce costs and ease management by providing a cohesive, business-driven virtualization strategy and design

The AM3 **evolve** service includes the following components:

Virtualization Assessment: Our consultants will gather requirements, help you create a high-level design architecture, and help expand virtualization knowledge in your organization.

Virtualization Design and Implementation: AM3 Technologies creates a detailed design for your virtualization solution. Depending on your needs, we can also help you to:

- Test and validate your solution
- Identify product acquisition needs
- Assist in staging and validation of the virtualization solution
- Create AM3 **encapsulate** (P2V) plan
- Implement virtualization over a phased time frame
- Address your rollout and migration requirements



Virtualization Support: AM3 Technologies drives the creation of support and management documentation. This provides your support staff with the necessary documentation, process and understanding of the virtual infrastructure so that they may effectively and efficiently manage it after the engagement is completed. This is a critical deliverable that is customized to your needs. Additionally, support documentation is created to encapsulate required change, modifications and upgrades to help maintain and evolve the virtual infrastructure over the course of time.

Virtualization project management: Throughout the planning, design and implementation phases, AM3 Technologies can help you keep your virtualization project running smoothly. We do this by creating a detailed work breakdown structure, managing change control, providing weekly status reports, and facilitating communications.

AM3 Technologies' Virtualization Assessment and Planning

This service helps you understand the gaps in your data center environment that can affect your virtualization solution. The service includes recommendations to help you get A better return on investment from your existing resources

and from your virtualization expenses.

AM3 focuses on:

- Requirements gathering for virtual Infrastructure deployment, including a financial and capacity analysis
- Back-end storage infrastructure to include SAN, fabric switching, NAS,DAS, iSCSI recommendations and best practices
- Network Infrastructure integration and management requirements
- Disaster Recovery requirements and processes
- High availability needs
 - Cluster and DRS Requirements
- Security
 - Firewalls
 - Intrusion prevention and detection
 - Service Console access best practices
 - LDAP Integration
- Future requirements for consolidated I/O and unified I/O
- Management
 - Simple network management protocol (SNMP) and syslog best practices
 - Management zones within the data center
 - In-band and out-of-band management recommendations
 - Event correlation
- Server inventory, performance, and utilization assessment of x86 servers running Windows and Linux
- Server virtualization design enablement requirements gathering
- Optimization of the virtual infrastructure across the data center
- Virtual Infrastructure architectural design
 - Architecture and design considerations based on interviews, capacity and financial analysis
- Assumptions and risk mitigation considerations

Table 1 shows the AM3 Technologies’ virtualization planning benefits, activities, and deliverables.

Table 1: *evolve* Assessment and Planning Benefits, Activities, and Deliverables

Benefits
Virtualization assessment and planning helps you to: <ul style="list-style-type: none"> • Plan for a smooth deployment of an end-to-end virtualization solution with a single set of recommendations developed by AM3 Technologies • Overcome process constraints to help accelerate the adoption of your virtualization solution across your IT organization • Get more from your virtualization initiative by developing an end-to-end virtualized reference

<p>architecture</p> <ul style="list-style-type: none"> Address increasing computing density requirements driven by server virtualization 	
Activities	Deliverables
<p>Requirements Gathering AM3 helps you identify technology and business requirements that affect the virtualization design which are identified in a variety of ways, such as:</p> <ul style="list-style-type: none"> Interviewing stakeholders across the IT organization using a workshop-based methodology Using a questionnaire to gather requirements Reviewing existing IT documents on infrastructure diagrams 	<ul style="list-style-type: none"> Requirements Definition Document Gap Analysis and Recommendations
<p>High-Level Design Architecture Development Create an end-to-end virtualized high-level architecture covering network, security, SAN and optimized Virtual integration</p> <ul style="list-style-type: none"> Conduct design options workshops High-level logical design of virtual infrastructure Define relationships and dependencies between components Map customer requirements into a high level design 	<ul style="list-style-type: none"> AM3 Technologies High-level Virtual Infrastructure Design
<p>Knowledge Transfer Conduct informal session to transfer knowledge about server virtualization design best practices to your IT organization to assist in operational readiness for the new architecture.</p>	<p>Workshop</p>

Virtualization Design and Implementation

AM3 Technologies’ engineers and consultants help you create a complete roadmap to guide you through a successful virtualization solution implementation. We focus on our core competence as well as integrate the components of your virtualization solution.

AM3 Technologies provides recommendations that include:

- Virtual infrastructure design
- Low-level design for the Layer 2/Layer 3 infrastructure and integrated design, including
- logical designs and device configurations
- Application optimization
- Security
- Wide area network (WAN), if applicable
- SAN
- Virtual Infrastructure configuration and installation procedures
- Virtual Infrastructure test and validation plan
- Virtual Infrastructure rollout and migration plan

Table 2 shows the AM3 Technologies virtualization design and implementation benefits, activities, and deliverables.

Table 2: *evolve* Design and Implementation Benefits, Activities, and Deliverables

Benefits	
Virtualization design and implementation helps you to: <ul style="list-style-type: none"> • Design a solution that helps reduce operating costs • Reduce expensive, time-consuming redesign by creating a well-engineered, end-to-end virtualization design to the extent possible • Accelerate enhanced application availability, scalability, and manageability using any-to-any connectivity 	
Activities	Deliverables
Low-Level Design Develop a detailed design plan for your virtualization solution that includes your servers, SAN and network environment and the associated device configurations.	<ul style="list-style-type: none"> • Detailed Design Document
Test, Staging and Validation Plan Use AM3 Technologies collection of test plans to test and validate your server virtualization solution. These plans demonstrate the proper functionality and performance of system components such as Vmotion, HA, DRS, Update Manage, physical server to virtual machine migration (P2V), operational goals such as failover and backup, and high-level goals such as server consolidation ratios. Use the AM3 virtualization test plan to conduct end-to-end, integrated test of all virtualization design components.	<ul style="list-style-type: none"> • Test Plan: AM3 Technologies test plan.
Product Acquisition and Implementation Plan Rely on AM3 Technologies collection of design documents, diagrams, and plans to help you systematically build a specific virtual infrastructure, with details such as the VI data center organization, VLAN diagrams, switch configuration, storage connectivity, virtual machine distribution and allocation, and how to build and configure the servers. AM3 Technologies’ consultants provide a low-level design of the virtual infrastructure, including physical and logical topologies, scalability, security, and redundancy considerations, recommended features and functions, software versions and configurations, and provisioning architecture.	Installation and configuration guide: <ul style="list-style-type: none"> • AM3 configuration guide • AM3 standard procedures guide • AM3 network and SAN design
Implementation and Migration Plan Plan for a smooth implementation and migration from your existing environment to a virtualized environment that helps you to do the following: <ul style="list-style-type: none"> • Perform migrations and minimize downtime 	AM3 Technologies Virtualization Implementation and Migration Plan

<ul style="list-style-type: none"> • Continuously and automatically optimize virtual machines within resource pools • Perform hardware maintenance without scheduling downtime and disrupting business operations • Proactively move virtual machines away from expensive and underperforming servers • Accelerate implementation with detailed virtual infrastructure plan • Migrate to the AM3 recommended virtualization architecture using a step-by-step plan • Identify ongoing issues affecting implementation or migration of the recommended designs • Coordinate migration and implementation support among the organizational boundaries spanning applications, server, storage, network and security teams • Rely on coordinated delivery from AM3 Technologies 	
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Virtual Infrastructure Support

Virtualization support helps you manage, maintain and administer your virtual infrastructure once it is implemented and running virtual machines.

AM3 Technologies provides virtual infrastructure support documentation to ensure the day-to-day tasks are documented and easily referenceable by operations staff. This includes provisioning, monitoring, patching and tuning the production virtual infrastructure.

Table 3 shows AM3 Technologies support benefits, activities, and deliverables.

Table 3: *evolve* Support Benefits, Activities, and Deliverables

Benefits	
<p>Virtualization support helps you to:</p> <ul style="list-style-type: none"> • Maintain your virtualization infrastructure on day 2 • Provide referenceable material so support staff can easily do their jobs • Document needed support processes and procedures for your organization 	
Activities	Deliverables
<p>Virtualization Support</p> <ul style="list-style-type: none"> • Review current support processes • Leverage any existing processes for virtual infrastructure • Incorporate any technical and business requirements into support document 	<ul style="list-style-type: none"> • Virtual Infrastructure Support Processes and Procedures Document throughout project

Virtualization Project Management

Virtualization project management helps you keep the planning and design phase of your

virtualization project on track and running smoothly. AM3 Technologies provides project management deliverables and give you a single point of contact for all communications.

Table 4 shows the AM3 Technologies virtualization project management benefits, activities, and deliverables.

Table 4: **evolve** Project Management Benefits, Activities, and Deliverables

Benefits	
Virtualization project management helps you to: <ul style="list-style-type: none"> • Keep your virtualization project running smoothly • Simplify management with a single project manager who keeps track of all deliverables and communications • Increase transparency with the project management team that is reviewing and monitoring interdependencies to the extent possible 	
Activities	Deliverables
Virtualization Project Management <ul style="list-style-type: none"> • Conduct project kick-off meeting • Develop work breakdown structure (WBS) • Plan task durations and dependencies • Provide project schedule including critical dependencies • Maintain project contact and resource lists • Provide and manage project change control and escalation procedures • Serve as AM3 Technologies project point of contact for all communications • Provide weekly status reporting on project tasks, milestones, and schedule and project issues 	<ul style="list-style-type: none"> • Project plan • Weekly status reports • Communications Plan throughout project

AM3 **evolve** leverages our ADIS process to provide an end-to-end virtualization program ensuring a successful virtual evolution of your physical IT infrastructure. We incorporate all best practices and utilize best-of-breed technologies based on your technical and business requirements. This ensures a customized virtual infrastructure that meets and exceeds your needs and reduces your costs.