Corporate Overview





Johnson, Mirmiran & Thompson, Inc.

Founded 1971

1,500 employees

100% Employee-owned

Core Values:

Safety Quality Integrity Relationships







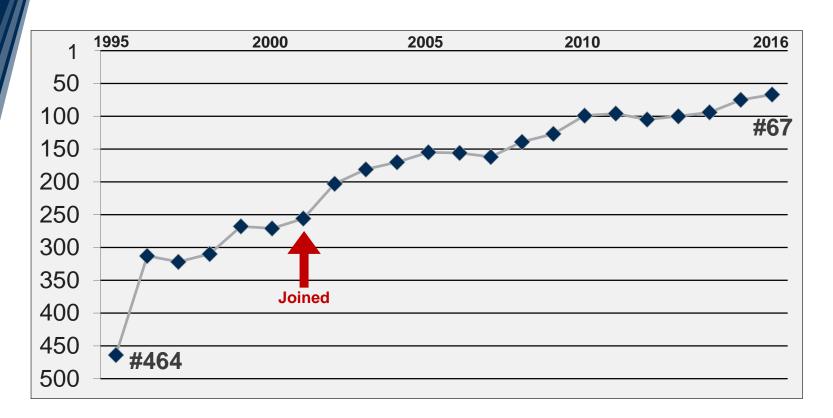
Mission:

To provide quality professional services that produce positive impacts and exceed expectations through imagination, innovation, involvement, and sound technical and business practices.



JMT's Continued Growth

Ranked #67 in the US among ENR's Top 500 Design Firms



- Ranked No. 43 in the U.S. among 'Pure' Design Firms (April 2016)
- Ranked No. 22 in the U.S. among Transportation Firms (July 2016)
- Ranked No. 11 in the U.S. among Highway Design Firms (July 2016)



Office Locations



Perform Services Nationally

Allentown, PA Austin, TX Charleston, SC Cincinnati, OH Cleveland, OH Columbia, SC Columbus, OH Fort Lauderdale, FL Georgetown, TX Harrisburg, PA Herndon, VA Jacksonville, FL Kinnelon, NJ Lake Mary, FL McKinney, TX Naples, FL Newark, DE Newark, NJ New York, NY Palm Beach Gardens, FL Philadelphia, PA Pittsburgh, PA Port St Lucie, FL Raleigh, NC Richmond, VA Sparks, MD (headquarters) Tampa, FL (2 offices) Towson, MD Trenton, NJ Vero Beach, FL Virginia Beach, VA Washington, DC

York, PA



Selected Clients

State Clients

Maryland Department of Transportation Maryland Department of General Services Maryland Stadium Authority District (of Columbia) Department of Transportation **Delaware Department of Transportation** Florida Department of Transportation New Jersey Department of Transportation New Jersey Turnpike Authority New York City Department of Transportation New York City Department of Environmental Protection New York State Department of Transportation Pennsylvania Department of General Services Pennsylvania Department of Transportation Pennsylvania Turnpike Commission South Carolina Department of Transportation Virginia Department of Transportation West Virginia Department of Transportation

Local / Private Clients

Education
Healthcare
Industrial/Commercial

Federal Clients

Federal Highway Administration
Federal Bureau of Investigation
Federal Energy Regulatory Commission
Food and Drug Administration
Naval Facilities Engineering Command
National Park Service

U.S. Air Force

U.S. Architect of the Capitol

U.S. Coast Guard

U.S. Department of Agriculture

U.S. Army Corps of Engineers

U.S. General Services Administration

U.S. Fish & Wildlife Service

U.S. Department of Veterans Affairs

U.S. Senate

Energy & Telecommunication Clients

Baltimore Gas & Electric PEPCO Verizon Gas & Pipeline Companies



Our Core Markets

Transportation

Buildings & Facilities

Water, Wastewater & Utilities

Energy

Federal Programs

Information Technology















Our Core Services

Surveys & Mapping

Planning

Design

Program & Construction Management

Environmental & Sustainable Solutions

Innovative Project Delivery











Bill Smith & JMT History

- Joined JMT September 2002
- Dual Role
 - CIO
 - Develop a Technology Business Practice
- JMT Technology Group Brand
- Relinquished Technology Group responsibilities January 2016



JMT Technology Group Overview

Division within JMT for external client services

75 + Information and Geospatial Technology Professionals

Portfolio

- Geographic Information Systems
- Enterprise Information Management
- Asset Management
- Business Intelligence
- Licensing & Registration









JMT Technology Group Overview

Services

- Business Analysis
- Needs Assessment & Strategic Planning
- Program Management
- Data Services
- GIS Analysis & Modeling
- Applications Development
- Interactive & Multimedia Design
- System Integration
- Technical Writing
- Training
- IT Design, Implementation & Administration
- Call Center, Help Desk, IVR Services

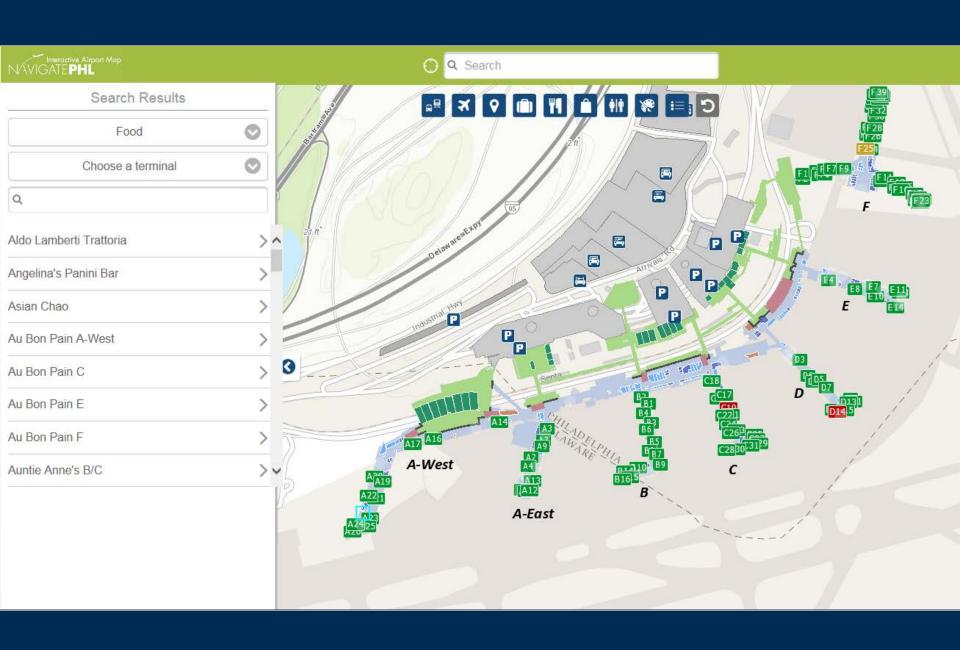


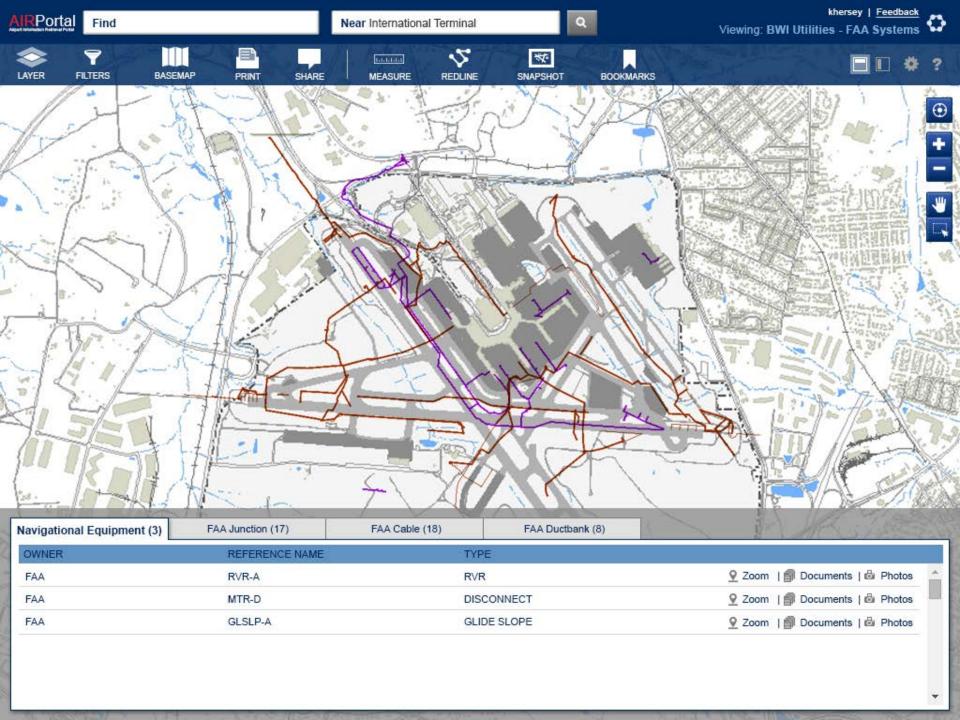


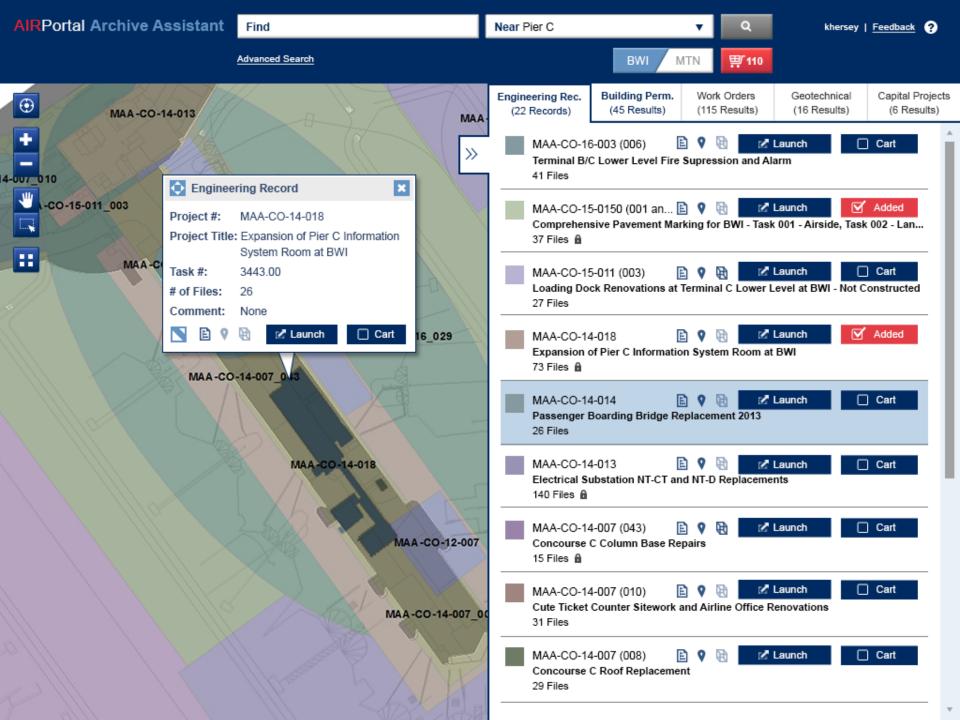


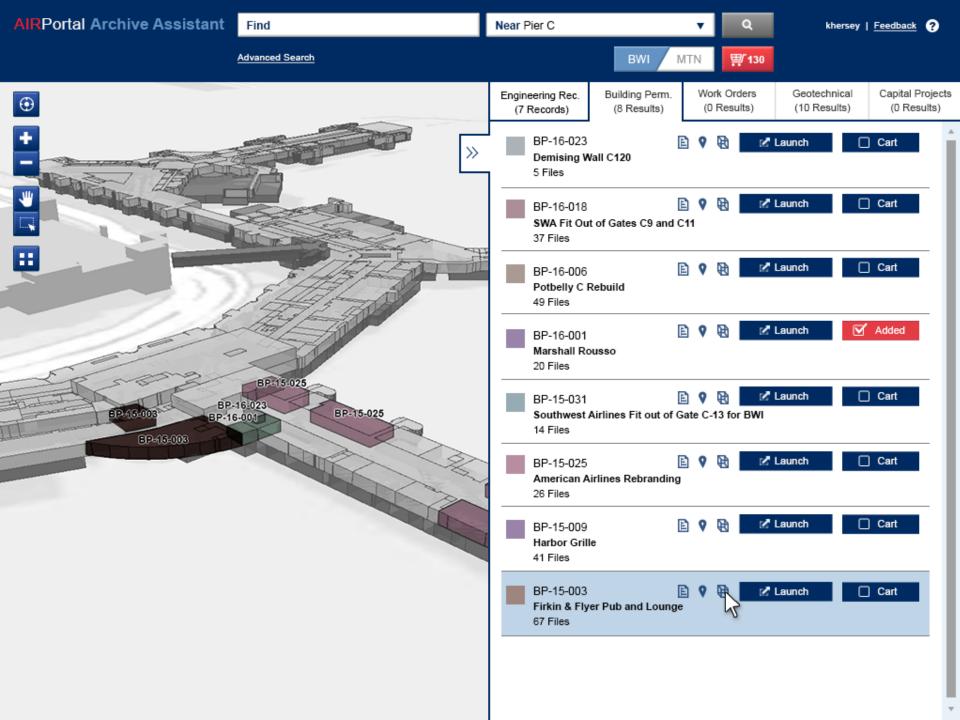




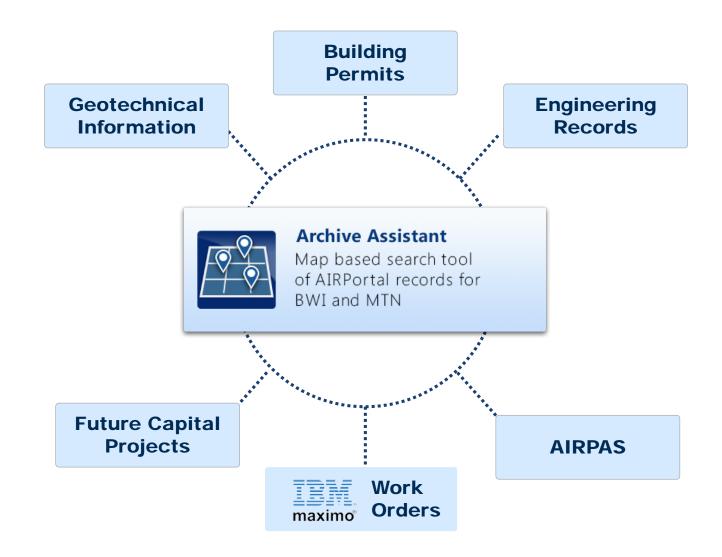








Application Architecture





West Virginia DNR

Electronic Licensing & Game Check System





System Update

Hunters and trappers may now check their game via the telephone at 1-844-WVCheck, the website <u>www.wvhunt.com</u>, or by visiting a license agent. Hunters and trappers must obtain their DNR ID number before using the telephone game check option. To see more information consult the <u>2016-2017 Hunting and Trapping Regulations</u>, page 44.

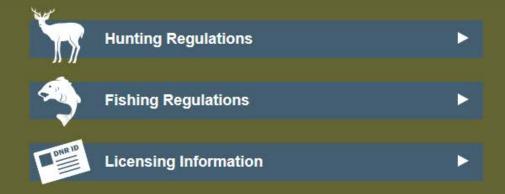
Purchasing a license is more convenient than ever before. This site will allow you quick and easy access to hunting and fishing licenses, regulations and other important information about outdoor recreation in West Virginia.

Using ELS you can...

Purchase a License Manage your DNR Profile

Renew a License Print Field Tags

Re-Print a License Check Game



ELS User Guide Frequent

Frequently Asked Questions >

Customer Service >

Print License Applications:

Lifetime Licenses ►

Senior Lifetime Licenses >

Disabled Veteran and POW Hunting/Fishing Permit >

Class Y Crossbow Permit >

DDFL Application >

IT Overview



IT Organization and Staff Overview

- 24 Full Time Employees
 - Augmented by consultants and contractors
- Deputy CIO Mike Ingoe
- Functions
 - Service Desk
 - Business Applications
 - Infrastructure Network, Servers, Storage
 - Security
 - Design Technologies Group
 - Strategic Advisory & Innovation
- Ratio: 1 IT staff / 62.5 employees
- Direct Labor Salaries ~ \$2M



IT Overview

- Our IT Portfolio
- Locations
- Service Desk
 - Hardware/Software Procurement
 - PC's, tablets and phones
 - Printers (>100) & Plotters (35)
 - Vendor Management
- Infrastructure
 - Data Center
 - Network (Internet, Wan & Lan)
 - Telephony and collaboration
 - Server, Storage, Backup
- Bi-Modal IT



Locations

- 26 Offices
- 8 Site Offices/Trailers
- M&A Integrations
- Office Moves

Corporate Headquarters Move

- Plan February 1, 2017
- Sparks to Hunt Valley
- Build a NEW network
- Plan & execute the transition
- Physical move of computers, phones, printers, plotters



Service Desk

Extension 5555 or ITHELPDESK@jmt.com

- Employee support (calls, emails, tickets) 7/24/365
 - 24-Hour support (Vitalyst)
 - Office Liaisons
 - Requisition workflow process automation
- Hardware/Software Procurement & Deployment
 - PC's, tablets and phones*
 - Computer (new users & refresh)
 - Software Deployment (new, updates)
 - Patch Management
 - Software License maintenance and audits
- Vendor Management
 - Printers (>100) & Plotters (35)
- Audio Visual & Collaboration Support
- MDM implementation and support
- User account creation, maintenance and deactivation
- Cisco Call Manager maintenance and support



Software Titles & Applications

Over 400 Software Titles

- Desktop & Productivity Applications
- Business Applications
- Engineering Applications
- Development Applications



Productivity Applications



















Adobe® Creative Cloud™







Talent Management
Competency Management
Compensation Management



Ultimate SOFTWARE

HRIS

Benefits Administration

Employee Self Service

Payroll





Lead & Opportunity Management Pipeline

Client Relationship Management
Contact Management
Qualifications Management

People

- Education
- Professional Licenses
- Work

Firm

- Work
- Contracts
- Projects





Project Planning & Accounting

Finance & Accounting

Contract Management

Supply Chain & Procurement

AR & AP

Resource Planning

Analytics





Team Collaboration

Project Sites

Proposal Sites

Intranet

Blogs

Wiki

Portals

Reports

Employee Info



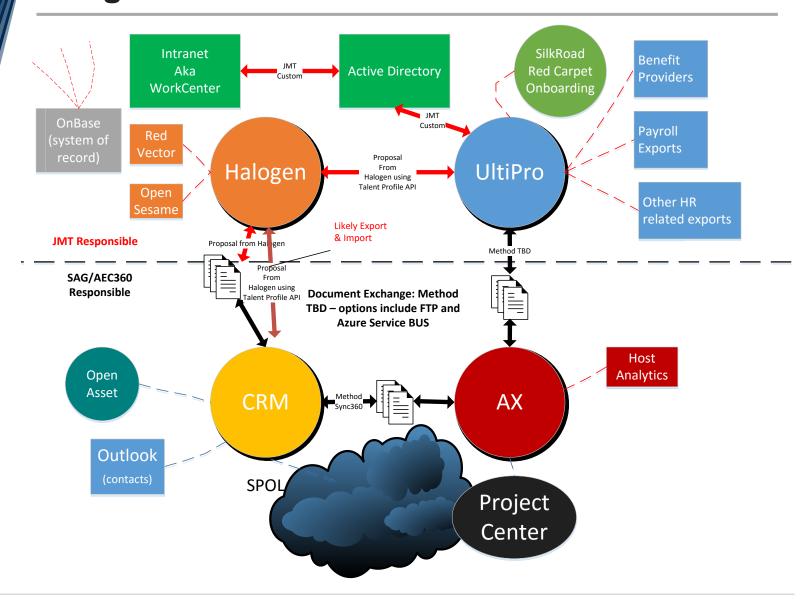




Business Intelligence, Analytics & Dashboard
Financials
Project Manager
Pipeline
Backlog
Utilization
Etc.



Integrations



Engineering Applications

















No Limits





Software Development Applications

- Microsoft
- Oracle

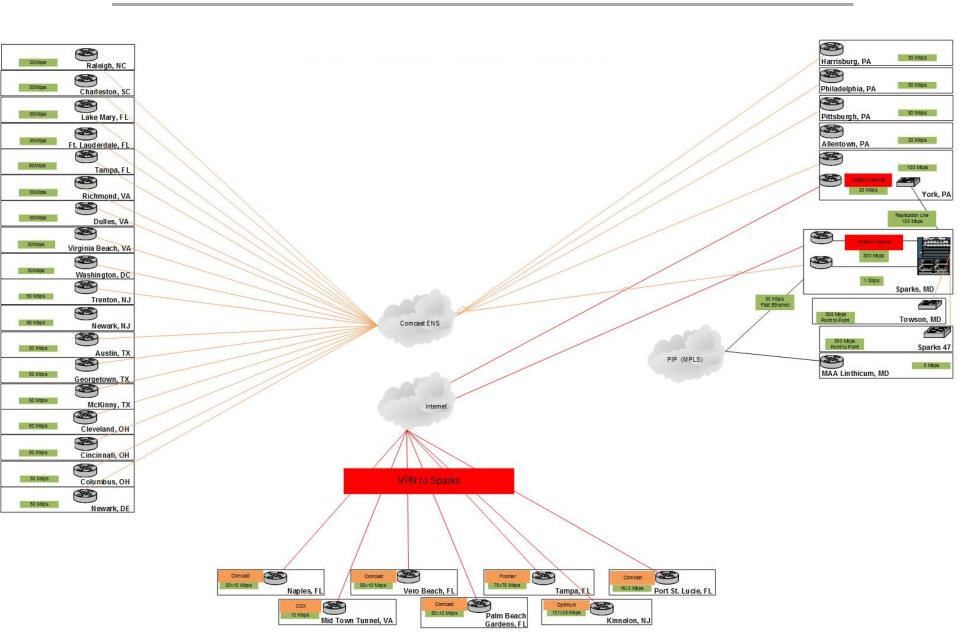


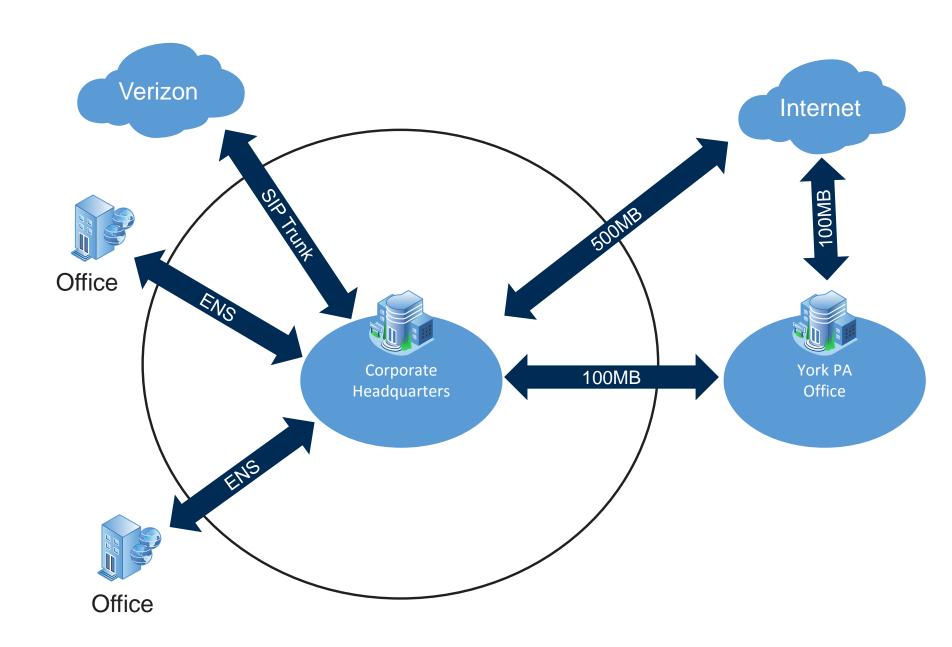
Infrastructure - Network

- Comcast Enterprise Fiber for Private WAN connection
 - ENS (Ethernet Network Service; Any to Any)
- Cisco 4331 routers and 3650 switches
- Check Point Firewall
- Zscaler Internet Proxy
- Mimecast E-Mail filtering
- Internet connectivity
 - 500MB Internet Sparks
 - 100MB York (redundant routing)
- Point to Point Connections



JMT Wide Area Network





Infrastructure - Datacenter

- 2 x Cisco 6506s in VSS configuration network core
 - Soon to be replaced with 2 x Nexus 9504s
- Cisco 3750 stack top of rack switches
 - Soon to be replaced with Nexus 9372s
- Cisco UCS servers
 - VMware ESXi 6.0
- HP C7000
 - VMware Horizon View
 - DMZ Servers
 - Domain Controllers
- Legacy Dell PowerEdge servers



Infrastructure - Data Storage

- NetApp Storage (140TB)
 - Replicated to secondary site
- Nasuni file server (41TB)
 - Cloud Storage
- Backup AWS (5TB)
- Office 365 (3TB)
- Some local server storage



Infrastructure - Phone and Collaboration

- Cisco Communications Manager 10.5
- Cisco Unity Connection 10.5 (Voicemail)
- Cisco Jabber for IM&P, Softphone, Desk Phone Control
- Cisco WebEx



Security

- Goal: ISO 27000 Framework
- CheckPoint Firewall
- Azure Active Directory Services
- Zscaler
- Mimecast
- Maas 360
- Symantec
- Office 365
- Data Classification



JMT Computer Security

Input

- E-Mail
- Web Access
- Remote Employee Access
- Employee and Non-Employee access
- Software as a service (SAAS)
- Storage Devices

JMT Systems



Output



- E-Mail
- Web Access
- Access to other systems
- Software as a service (SAAS)
- Banks



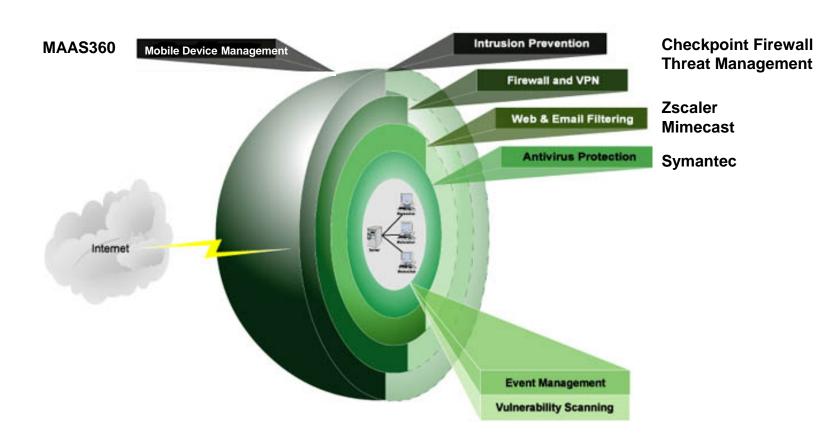
Storage Devices/Services

Access and Information Entering JMT Systems

Internal Permissions to Services and Data

Information Departing JMT Systems

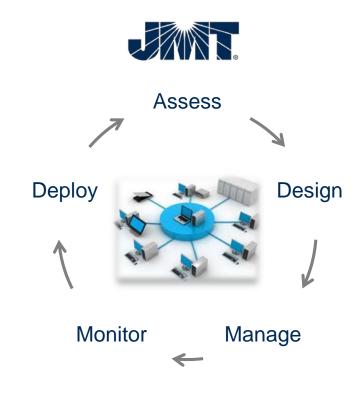
JMT Computer Security



Information Security Lifecycle

Access Controls

- Active Directory Permissions
- Server Side Permissions
- Limit ability to create/modify permissions
- Perimeter Rules to limit access
- Policy creation...Work Center Security Matrix



System Controls

- Server/Desktop Patches
- Anti-Virus Protection
- Microsoft Group Policy

Design Technology Group

- Project deliverables development
- Collaboration
 - Amongst JMT Practices
 - Amongst JMT Offices
 - With sub-consultants and team partners
 - With client owner
- Business Process efficiencies
 - Standards
 - Execution Plans
 - Start with the end in mind
 - Life Cycle Service
- Revenue generation



Strategic Advisory & Innovation

- Business Strategic Planning
- Do more with less
- Advisory Boards



What Keeps Us Awake?



Concerns

- Security
- Business Continuity
- Remaining a competent "trusted advisor"
- Successful delivery
- Adapting to change and shifts
- Staff



Security Concerns

- Business alignment & governance
- Balance Risk & Value
- Protecting the Crown Jewels
 - Can you protect everything?
- Everyone's worst nightmare... Ransomware
- Creating Security Aware Organization



Security Concerns

Creating Security Aware Organization

"Organizations must recast the way people handle information, from the C-suite to summer interns. In such a culture, secure procedures for data become second nature, much like fastening a seat belt or storing matches in a safe place."

"Every single person can be the infection point for the enterprise, whether it's from clicking a dubious attachment, plugging in the wrong USB stick or failing to install a security patch on a tablet. So the effort to create a secure enterprise must include everyone. Building a risk-aware culture involves defining the risks and goals, and educating all users by spreading the word. But the important change is cultural. Think of the knee-jerk reaction — the horror — that many experience if they see a parent yammering on their phone while a child runs into the street."



Business Continuity / DR Concerns

Not just an IT issue

Business Continuity

- Having sufficient measures and plans in place to provide business continuity, at a minimum, to the agreed upon service level commitments.
- Educating fellow leadership to ensure they understand the risks and our vulnerability.
- Business members owning their role and being aligned
- Modify and adjust plans to address and take advantage of cloud solutions
- Incident Response readiness



Remaining a competent "trusted advisor"

- Balance Innovation with Stability
- As business strategies change (change is inevitable), are we ready?
- Being prepared to pivot with business
- Business Alignment... One thing to get aligned...
 another to <u>stay</u> aligned
- Success leads to increased demand for IT solutions
- As younger tech savvy leaders emerge, demands for innovative solutions increase



Successful Delivery

Need I say more?



IT has changed and shifted

- Migration to the cloud
- Agility
- Staff
 - Redundancy
 - Do I have the skills I need?
 - Is the staff evolving



Questions

