

Implementing & Managing Revit

ArcSource Lessons From The Trenches

Presented by
Aaron Marks and Aaron Poser



Some Context: IT Trends in Architecture

- Revit getting major traction
- Project data explosion continues
- Emergence of Autodesk Cloud Solutions
- Increasing AutoDesk software costs
- CAD/BIM standards resurgence
- Smart drafting and modeling tools



More Context: IT Trends in Architecture

- Tablets for principals
- FTP alternatives
- Dual and triple monitor workstations
- Personal mobile devices at work
- Work anywhere
- Hard drive prices continue to drop
- Cloud storage prices plummeting
- Managed IT services: ITaaS
- Cloud, Cloud, Cloud

Today's Agenda

- 1 About ArcSource**
- 2 Transitioning CAD to BIM**
- 3 Managing Revit Backups**
- 4 Collaboration Tools**
- 5 Q&A**

About Dave Monk

ArcSource CEO

- Founded ArcSource in 1998
- 20+ years of IT leadership
- M.Arch. from UC Berkeley
- M.S. Structural Engineering from UC Berkeley
- Worked at William Turnbull Assoc. and Turnbull Griffin Haesloop
- Loves architecture, technology, business, and serving clients
- Expert at integrating technology into AEC design process



About Aaron Marks

ArcSource VP of Client Services

- With ArcSource since 2008
- Leads consulting and support teams
- 10+ years in corporate IT
- Degree in Computer Information Systems from HSU
- Excels at making Mac and Windows cross platform environments work seamlessly
- Loves technology a little too much



About Aaron Poser

ArcSource Lead Consultant

- Joined the ArcSource team in 2012
- M.Arch. from UC Berkeley
- Loves the both the artistic and technical aspects of architecture
- Worked at Gelfand Partners
- Understands the full AEC collaboration process
- Experience working as architectural designer and IT manager

Our History

- 15 years of delivering IT services to AEC firms
- Now serving over 170 businesses and nonprofits
- Constantly monitoring trends in business, AEC, tech
- Advising clients on getting the most out of technology
- Fully managed IT services for businesses of any size



Our Mission

- Partner with our clients towards their success
- Share expert knowledge to solve our clients' problems
- Deliver excellent technical services
- Provide highest value and service to our clients



Introducing...



twitter 

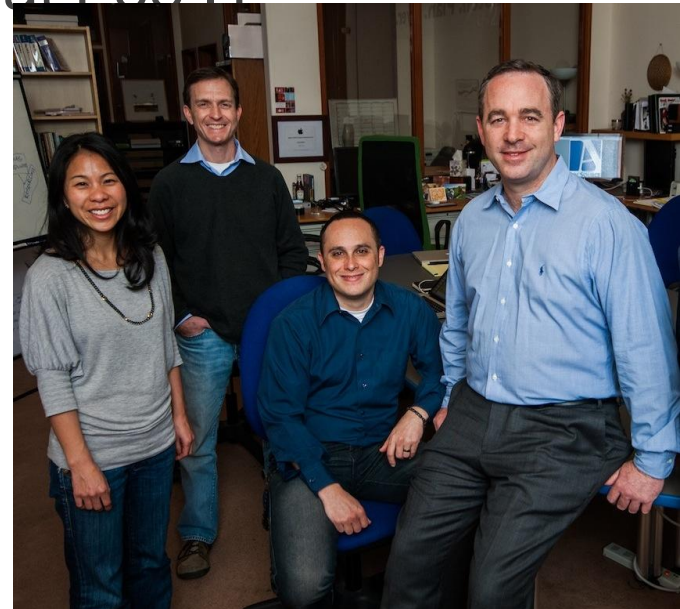


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FOR ARCHITECTS

ArcSource is:

IT for Architects

- We design, build, and manage rock solid networks
- One third of our staff have degrees in architecture
- Focus on best practices: always improving and refining
- Cross platform experts: hundreds of PCs & Macs
- ArcSource Managed Care Services: Flat Fee IT
- Cloud Solutions:
 - Google Apps
 - Backups
 - Voice
 - CRM
- Consulting Services
- ArcSource CAD Workstations



About ArcSource

Some of Our Clients

- Aleck Wilson Architects
- AXIS Architecture
- Bohlin Cywinski Jackson
- David Baker Partners
- Fernau and Hartman
- Sherwood Design Engineers
- SB Architects
- Tom Eliot Fisch
- Turnbull Griffin Haesloop
- Walker Warner Architects



Upcoming Seminars at AIASF and AIAEB

- IT Trends in Architectural Practice
- Google Apps for Architects
- Managed Backups for Architects
- Cloud Computing for Architects

AIA East Bay



A Chapter of The American Institute of Architects



ArcSource Lessons From The Trenches

Keys to Revit Success

- Principal level commitment to new technology
- Develop a full Revit implementation plan
- Revit user training: up front and ongoing
- Revit standards development
- Hardware infrastructure
- Understand Autodesk licensing and suites
- Principal level patience with change
- Understanding how project phases change
- Start with the right project

Transitioning from CAD to BIM Process

8 Major Components We Will Consider

1. People
2. Schedule
3. Hardware and Software
4. Determine Access
5. BIM Use
6. Define Level of Development / Detail
7. Develop Standards
8. Define & Map Workflow



1: People



- Assess existing staff - Grow from within
 - Proficient/Advanced Users
 - Beginner or Eager to Learn
 - Technical - PMs, Technical Director, etc.
 - Resistant to change
- Training
- Staffing
 - Building the team
 - Define roles and responsibilities
 - Support
 - Technical - IT, BIM Manager, Technical, etc.
 - Management Support - Managing Principal(s)

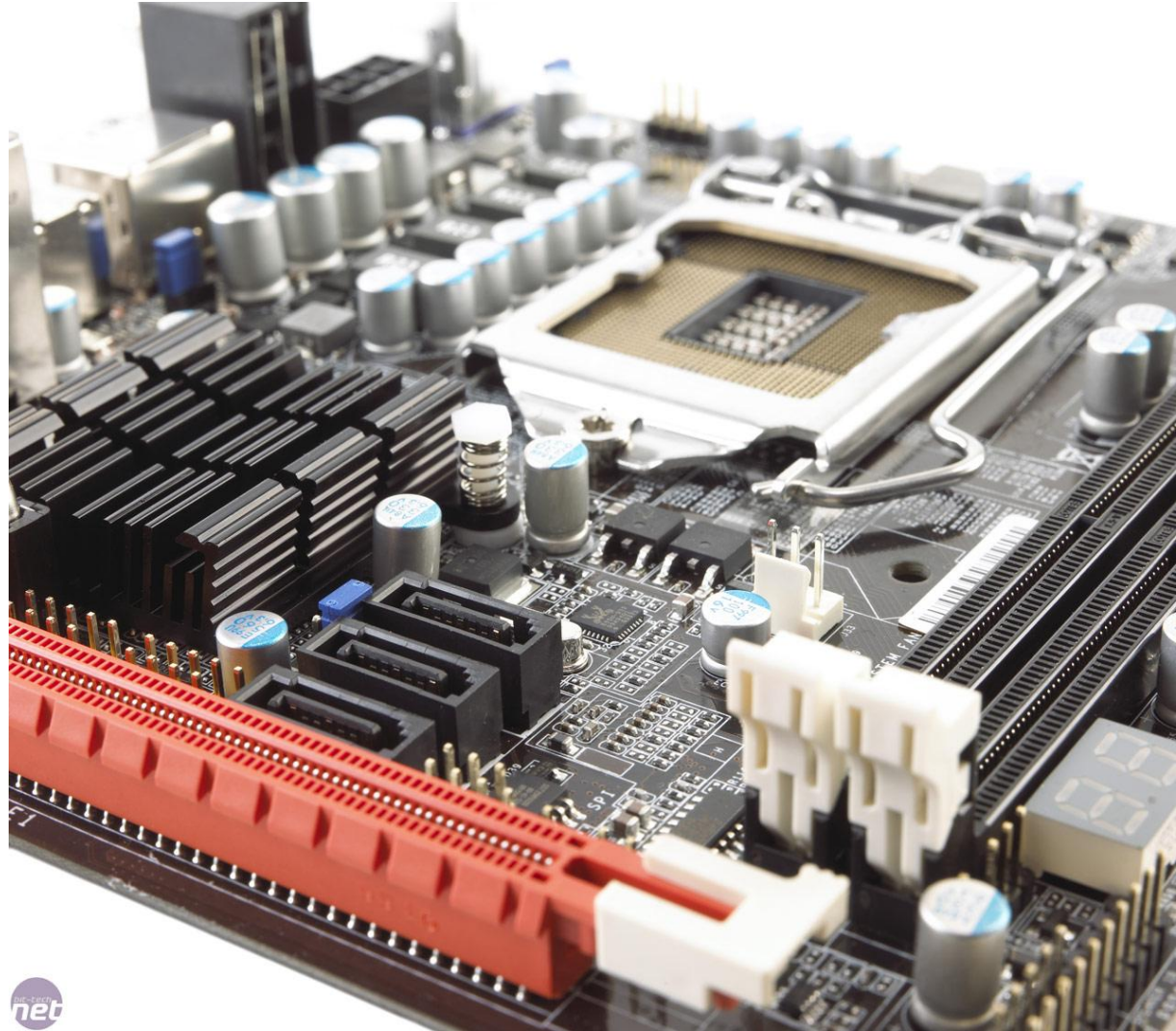
2: Schedule

- Determine time frame of migration
 - Development of standards, templates, families, etc
 - Schedule training within one to two months prior to starting a new project.
 - Availability of staff to be trained
 - Availability of trainer and/or training facility
- Project milestones
 - For development and creation of families
 - To allow time for internal coordination
 - To allow time for QC prior to submission



3: Hardware + Software

- Will the existing infrastructure support the change?
 - Servers
 - Desktops
 - Network
 - Internet Service
- Software
 - Versions
 - Licensing
 - Revit Server

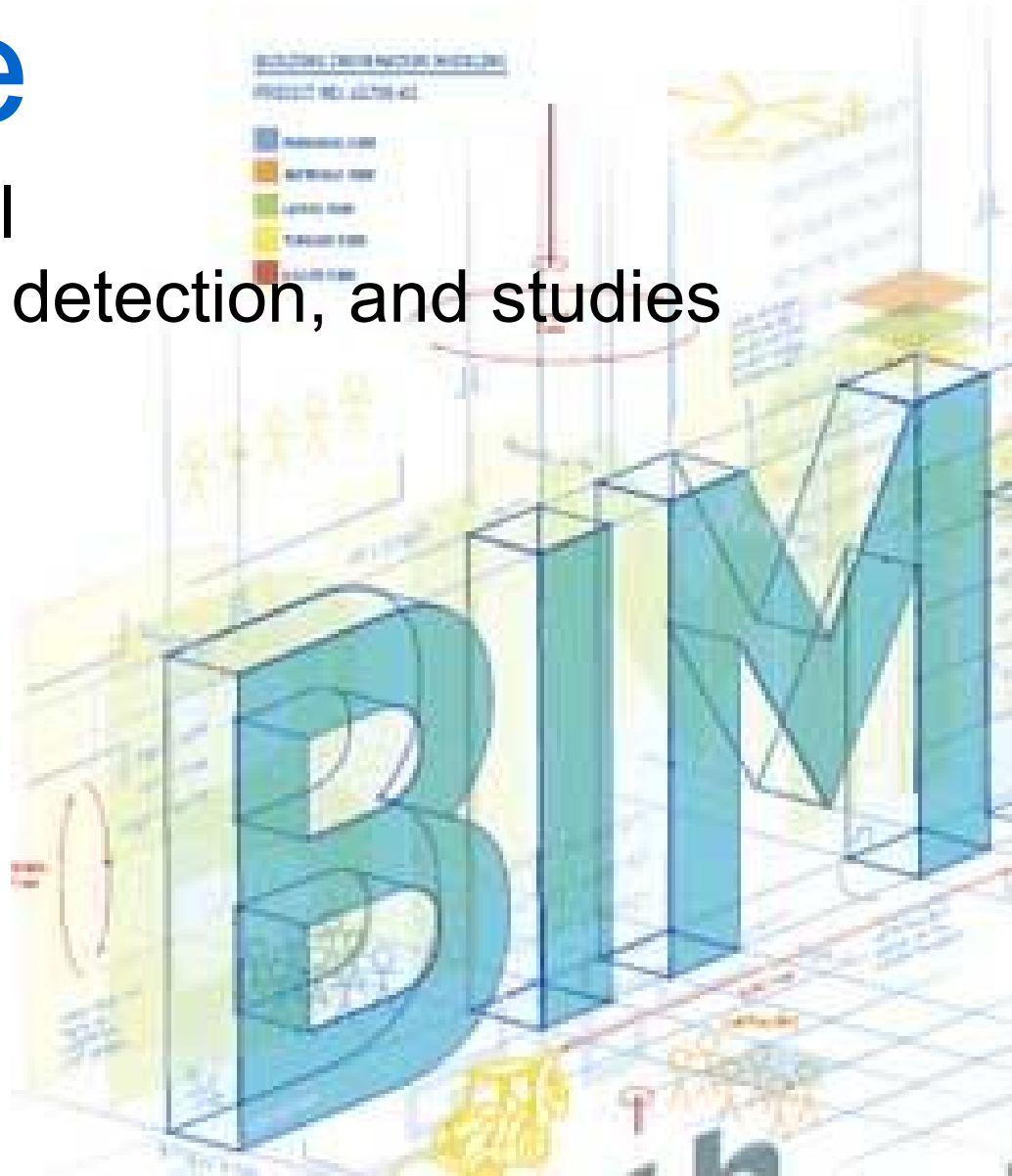


4: Determine Access

- Determine ownership of elements, worksets, etc.
 - Internal team and entire project team
- How will the model be accessed and shared?
 - Local
 - Remote users
 - FTP
 - Cloud

5: BIM Use

- Revit as drafting tool
- Collaboration, clash detection, and studies



6: Level of Development / Detail

- Graphics
 - Display at different scales
 - Display at different views
 - Lineweights
- Parameters
 - Family, project, and shared
- AIA BIM Protocol Exhibit document (E202)
 - Define Level of Development
 - Define ownership of elements

 **AIA**® Document E202™ – 2008

Building Information Modeling Protocol Exhibit

This Exhibit is incorporated into the accompanying agreement (the “Agreement”) dated the _____ day of _____ in _____ the year _____
(In words, indicate day, month and year.)

BETWEEN:
(Name, address and contact information, including electronic addresses)

7: Develop Standards

- File and family naming convention
- Templates
 - Project templates, Views, Project Browser, etc.
- Parameters
- Worksets
- Best practices

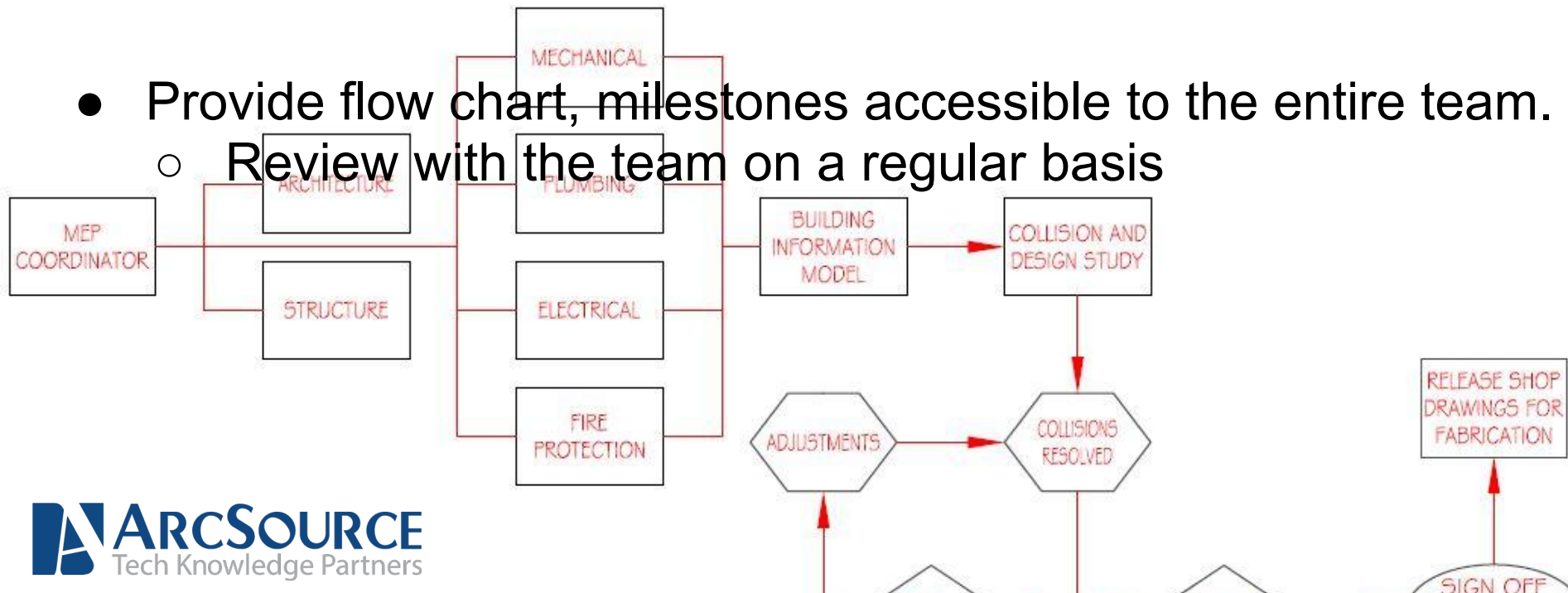


"I'M A STRONG BELIEVER IN CAD STANDARDS-THAT'S WHY I USE THIS EXCELLENT SET OF MY OWN"

8: Define and Map Workflow

- Internal and project team
 - Project team chart and roles
- Frequency of file updates or sharing
- What to do when changes occur? QA/QC process
- Collaboration
- Communication

- Provide flow chart, milestones accessible to the entire team.
 - Review with the team on a regular basis



Covering these 8 Major Components will allow for a smooth Revit deployment.

Now that you're up and running...

let's talk backup.

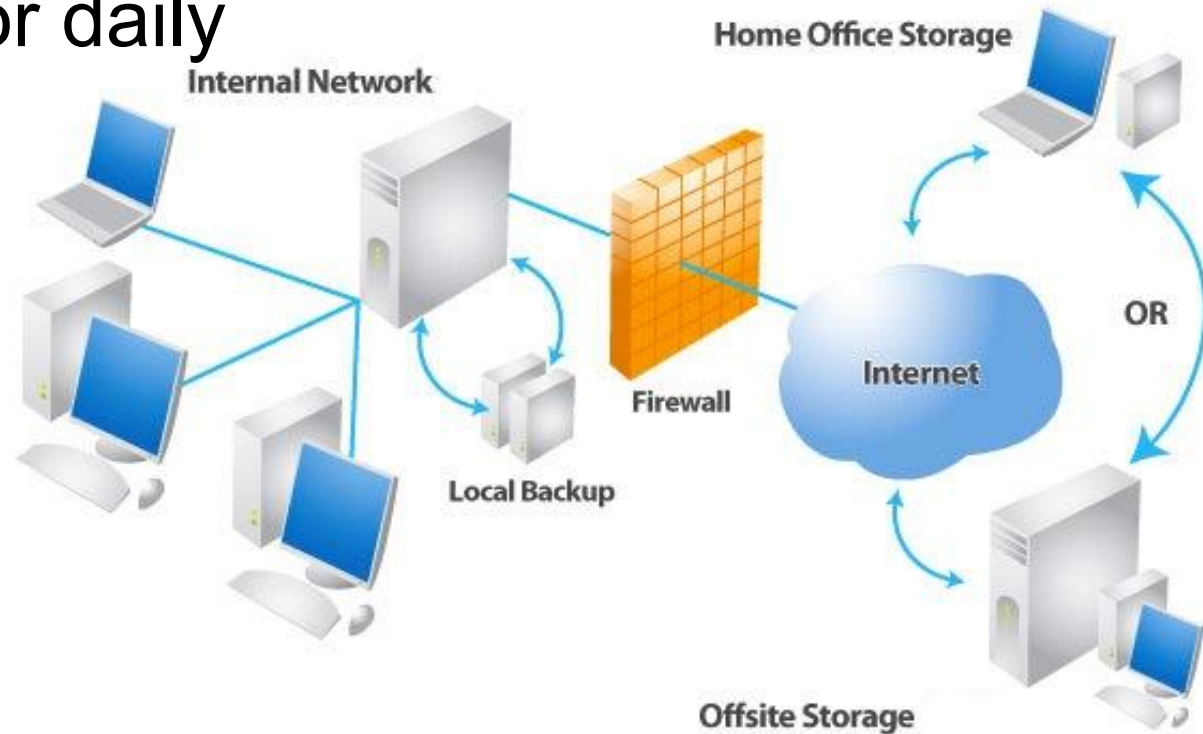
Backup Transformation

- Backup technologies have completely changed
- Major hardware and software feature advances
- No more rotating tapes and hard disks
- Dramatic drop in cost of hardware and cloud storage
- New needs for laptops, mobile devices, cloud data
- Data is more valuable



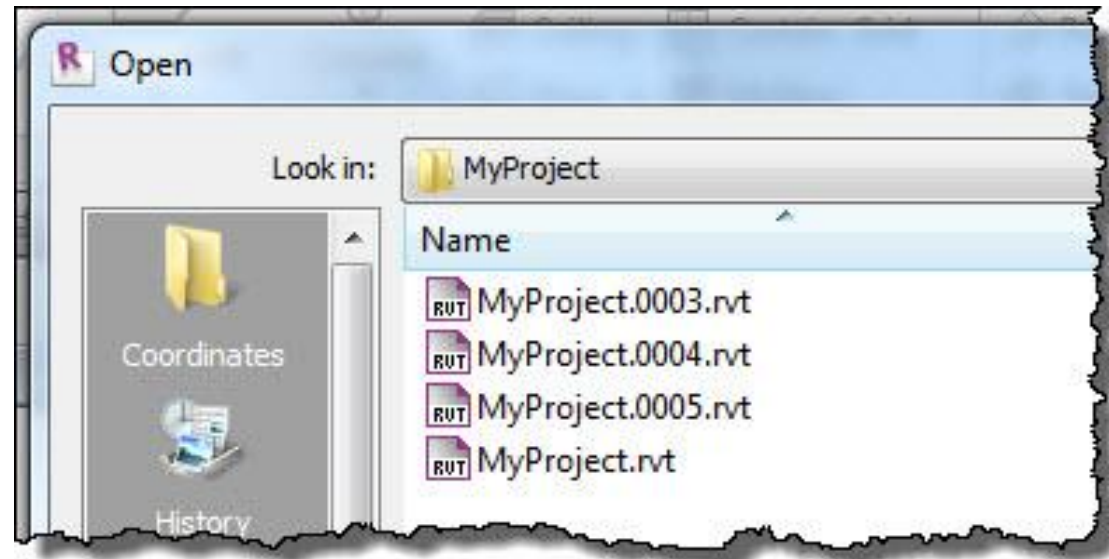
Designing for Backup Success

- Hardware, software, people, process
- Automated and continuous backups
- Multi-destination and off-site backups
- Perform test restores regularly
- Check/monitor daily



Keys to Revit Backups

- Revit keeps 3 incremental backup files in project folder
- Backup both server and local data for most protection
- Local files can be used to roll back the central model
- Revit Server: lock models and copy files to backup every 24h
- Revit Server: consider continuous backup without locks
- Set retention policies in backup software



For Larger Firms

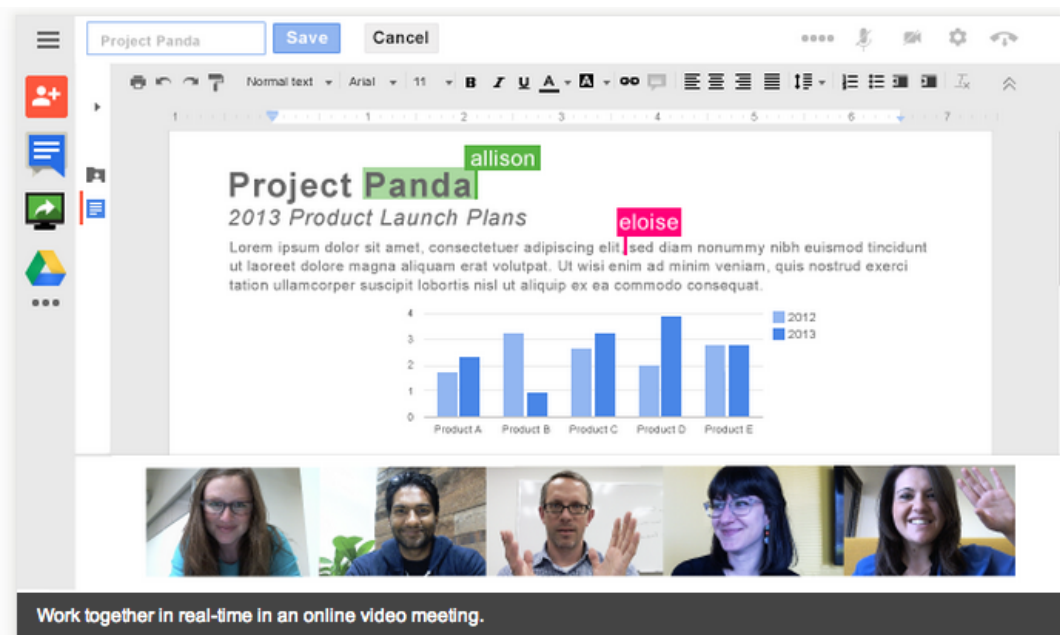
- Use Windows DFS for permanent name resolution
- Run parallel backup processes by system type
- Design Revit specific backup jobs and schedules
- Minimize restore times to maximize productivity
- Consider ArcSource BDR Appliance



Bonus: Go Google With ArcSource

Collaboration For Design Teams

- Google Hangouts
- Google Drive
- Google Docs
- Google Sites



Q&A

You have

Questions

We have

Answers

You've been listening to:

Implementing & Managing Revit

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Want more?

Dave Monk

Founder and CEO

dave@arcsource.com

510-843-2010

Aaron Marks

VP of Client Services

aaron@arcsource.com

510-843-2010

