

experience success

simplify experience | harness data | stay ahead | be efficient

Amdocs Network Rollout Solution

Cut time and cost for network rollout and change projects with process orchestration

amdocs

embrace challenge e^xperience success



Networks are evolving – fast!!

Introduction

With the massive growth in data traffic driven by high speed broadband, social media and streaming video services, service providers are under pressure to deliver even more capacity and a better user experience across broadband, cable, fixed and mobile networks. They need project orchestration to cut costs and speed up network deployment.

SERVICE PROVIDERS FACE THE CONSTANT CHALLENGE OF ROLLING OUT NEW TECHNOLOGIES AND UPGRADING NETWORKS WHILE MAINTAINING CUSTOMER EXPERIENCE USING EXISTING TOOLS AND PROCESSES.



Service provider challenges

Challenges faced by service providers rolling out and modernizing networks are not only due to the huge volumes of network elements which need installing or upgrading but also center around key questions such as:

- Where to upgrade or deploy new network infrastructure?
- How to plan network and projects cost effectively?
- Who provides the backhaul network?
- How can I utilize the field force more efficiently?
- How can I manage 3rd party suppliers better?

All this adds up to a complex problem of planning and project management involving thousands of fast decisions that need to be made each day as networks are planned and rolled out.

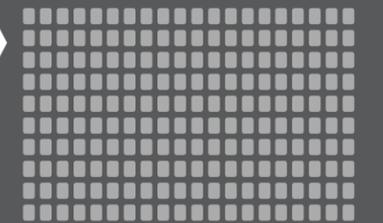
10x more connected devices



Hundreds of thousands of access points are being installed around the world



1,000s of network elements to deploy per month



Analysts are predicting network infrastructure spend will reach \$304bn by 2017.



Limitations of today's tools and processes

CURRENT PLANNING AND PROJECT MANAGEMENT TOOLS ARE INSUFFICIENT TO MEET TODAY'S CHALLENGES IN ROLLING OUT AND UPGRADING LARGE SCALE NETWORKS

CURRENT TOOLS AND PROCESSES:

- LACK OF END-TO-END ORCHESTRATION ACROSS MULTIPLE SYSTEMS AND ORGANIZATIONAL GROUPS
- INABILITY TO SCALE TO HIGH VOLUMES OF ROLLOUT PROJECTS
- LACK OF AGILITY TO HANDLE IN-FLIGHT PROJECT CHANGES
- NEED FOR CENTRALIZED INFORMATION FOR NETWORK RESOURCES
- LACK INTEGRATED TECHNICAL DESIGN
- POOR 3RD PARTY SUPPLIER MANAGEMENT

Solving the challenges



Complexity

- Replace manual internal order handoffs with overall project co-ordination and control



Volume

- Automate backhaul design process: feasibility and design in one
- Standardize designs with templates to enable "design once deploy often"



Lack of Automation

- Orchestrate across field, backhaul, supply chain, third party resources
- Enrich field engineering with complete, real-time data to ensure "one trip" installs (deploy, configure, connect, turn up, test)



High Cost

- Execute complete, fast, end-to-end, repeatable processes – at scale

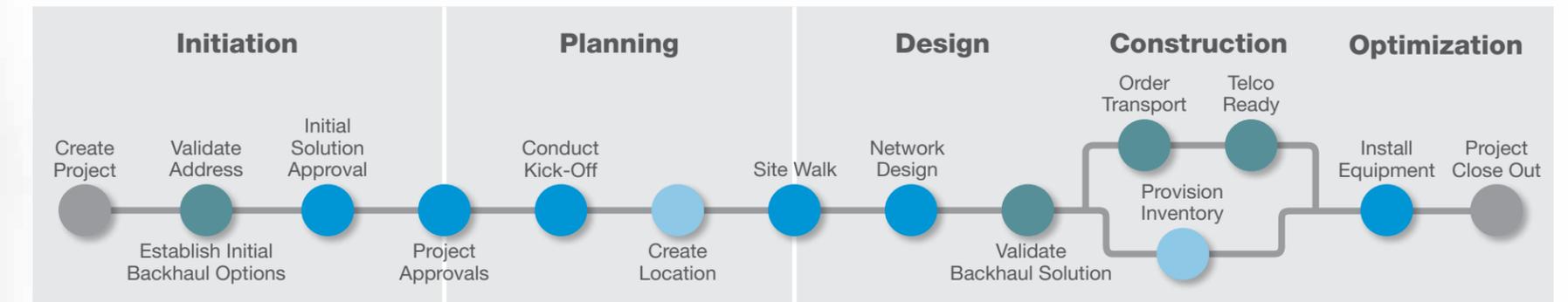
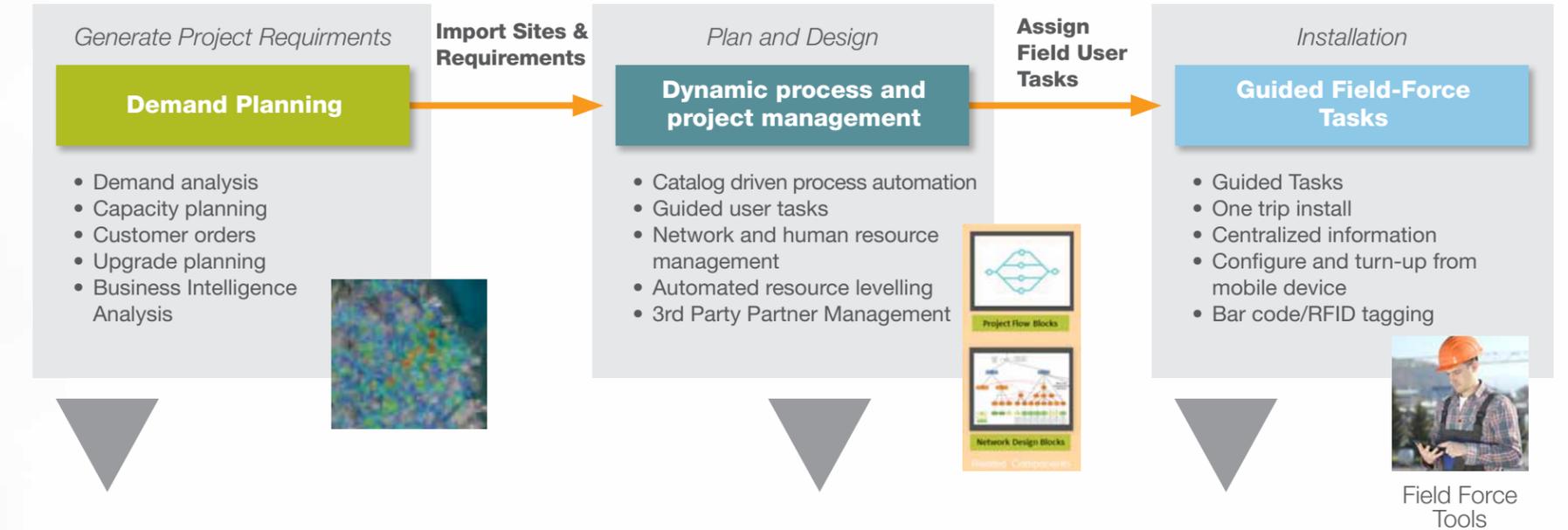
Amdocs Network Rollout Solution

Amdocs Network Rollout Solution provides a complete end-end project orchestration solution for planning, building and modernizing mobile and fixed networks. It reduces network deployment cost by up to 25% and network design time by more than 50% by automating the planning and project management process.

- SCALES TO TENS OF THOUSANDS OF ROLLOUT PROJECTS
- AUTOMATES THE ROLLOUT PROCESS – REDUCES HUMAN ERROR
- CUTS TIME AND EFFORT DETERMINING LEAST COST PROJECT OPTIONS
- REDUCES SITE VISITS TO ENSURE ONE -TRIP INSTALL
- ENABLES LOWER COST LABOUR FOR NETWORK DEPLOYMENT
- REDUCES TIME AND COST TO CHANGE PROCESSES BY UP TO 75%



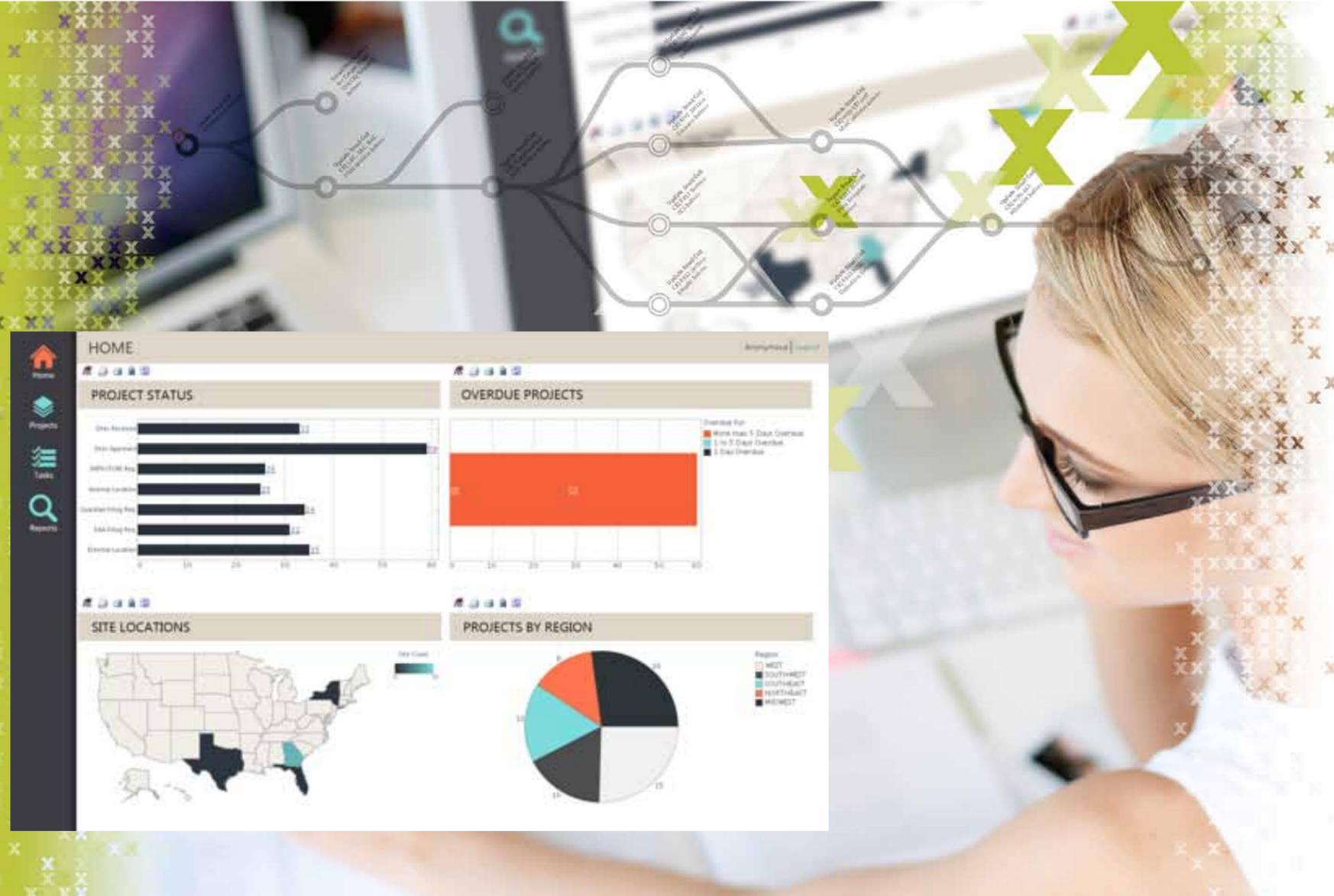
Automating the rollout process



Dynamic project and program management

Amdocs Network Rollout Solution generates project plans from standard plan templates relating to specific types of network such as 'Carrier Ethernet' or 'Wi-Fi access point'. The project plan is then dynamically updated with specific project variations based on the project requirements. This can significantly reduce time and effort for project planning. Each part of an access network may require a different transport options and design, and there could be thousands of them!

THE SOLUTION PROVIDES ENHANCED VISIBILITY AND CONTROL TO RUN HIGH VOLUME, MULTIPLE PROJECTS AT LOWER COST AND IN SHORTER TIME. THIS INCREASES ROLLOUT SUCCESS RATE BY SPEEDING THE IMPLEMENTATION OF IN-FLIGHT CHANGES, APPLYING MORE EFFECTIVE MANAGEMENT OF PROJECTS IN JEOPARDY AND IMPROVING VISIBILITY OF SIMULTANEOUS PROJECTS.

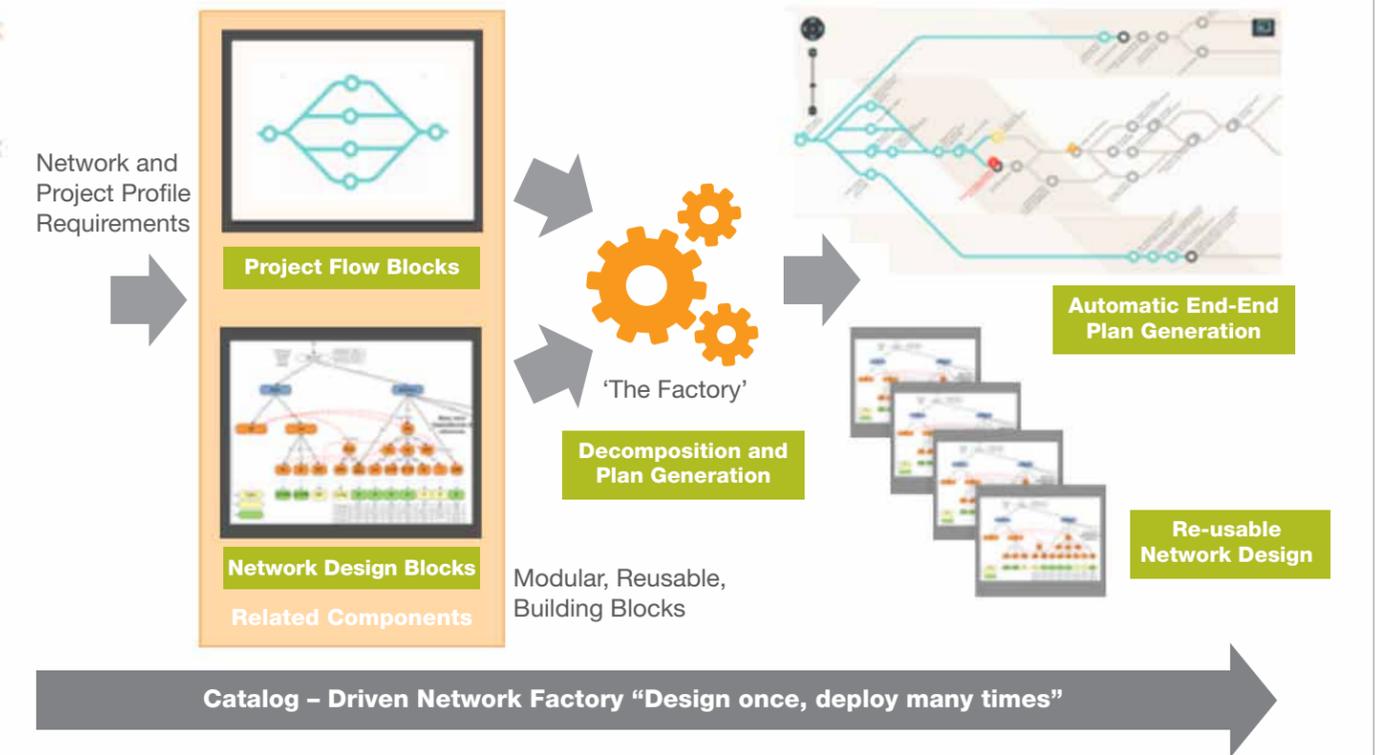


Amdocs Network Rollout Solution

Catalog driven process management

Amdocs Network Rollout Solution is based on a new catalog driven rollout platform which uniquely combines automated technical design with dynamic project plan generation using network technology specific building blocks. This approach differs from traditional workflow tools which are unable to build the plan and network design automatically.

Total project time can be reduced by up to 25% while network design time can be reduced by more than 50%.

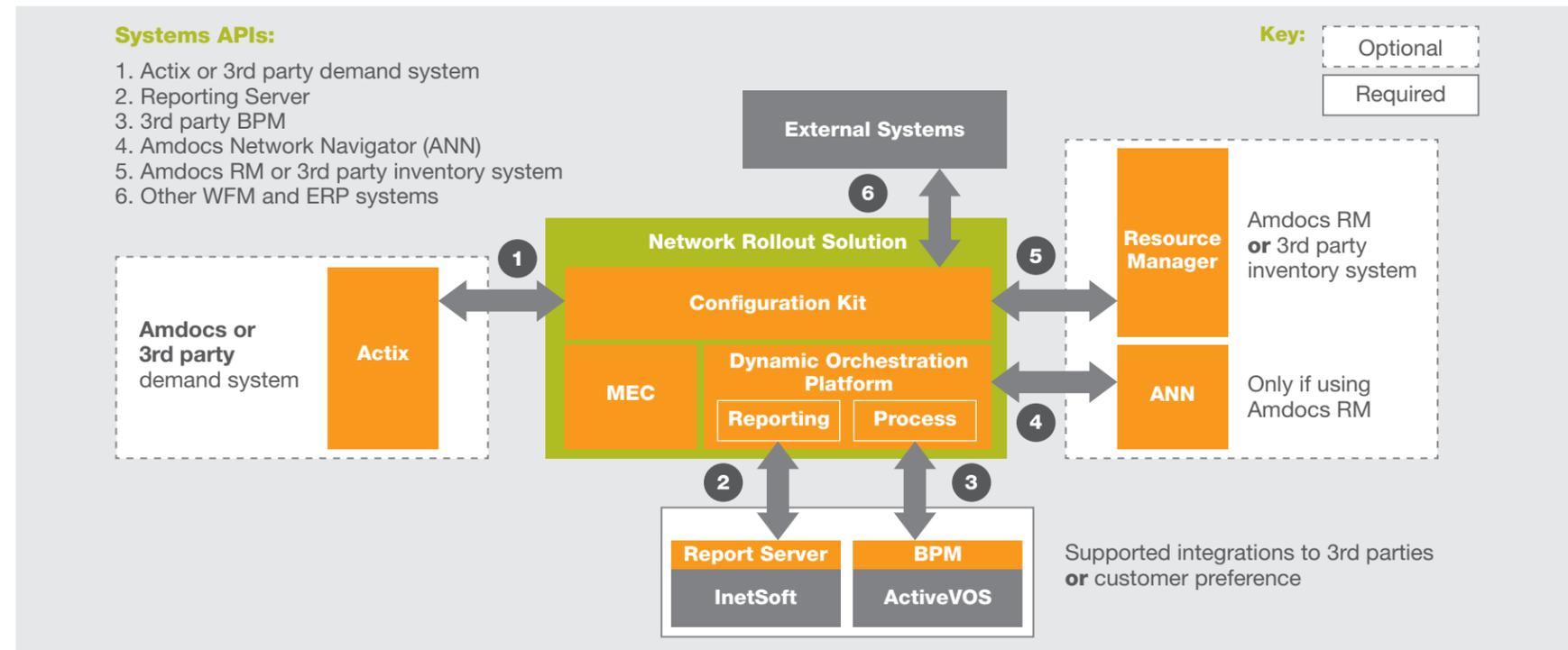


Solution technical overview and architecture

Amdocs Network Rollout Solution provides service providers with a complete end-end program and project management tool which supports demand planning, network and project planning, approvals, network deployment and maintenance processes for broadband, cable, mobile and fixed networks.

The Network Rollout Solution primarily offers a highly automated project management and workflow function across multiple back-office systems, having integration points (APIs) with the Demand System, Network Planning Tools, Workforce Management, BPM (Business Process Management), Reporting Systems, Inventory and Field Force tools.

The diagram below shows the high-level system architecture



The solution utilizes a third-party Business Process Management (BPM) system which may already be part of the service provider's IT infrastructure, and adds a layer of end-end orchestration above it which is based on the Amdocs' enterprise product catalog (EPC). The inventory system is a key optional component which provides a centralized repository of key information about the network model, capacity, physical resources (equipment), sites, and assets etc.

The project 'order' is derived by the demand system and passed to the Network Rollout Solution which automatically generates the project plan and technical design for each network element from the project requirements. Resource leveling is then carried out before plan optimization and execution. Project status reports can be provided on-demand in the form of management dashboards and web reports showing key data such as project KPIs.

Amdocs Network Rollout Solution software is built on Amdocs OSS' core architecture – a modular, open, standardized infrastructure and services for integration with other systems. It is aligned with and supports industry standards patterns and frameworks, including TM Forum SID, eTOM, TIP and SOA (service-oriented architecture).

Systems APIs

Amdocs Network Rollout Solution provides a number of key interfaces (APIs) into other management systems.

- Amdocs or 3rd party demand system (1): Candidate projects (plan of demand) can be imported from Amdocs or 3rd party demand systems
- Reporting Server (2): Reports can be exported to 3rd party reporting tools
- 3rd party BPM (3): Amdocs Network Rollout Solution requires a 3rd party BPM system to support workflow. Informativa™ ActiveVOSTM is one such system that has been integrated with the tool. Other systems may also be integrated via the BPM API
- Amdocs RM or 3rd party inventory system (5): Network inventory systems such as Amdocs Resource Manager and other 3rd party inventory systems may be integrated with Amdocs Network Rollout Solution through the Inventory API
- Other WFM and ERP systems (6): Other 3rd party operations and business support systems such as Work Force Management (WFM) and Enterprise Resource Planning (ERP) tools may be integrated with this API

Empowering the field force

The cost of deploying and configuring networks need to meet commercial objectives so field force costs can be kept as low as possible. The goal for service providers and professional services companies involved in deploying the network is to be able to employ cost effective contractors and supply them with an easy-to-follow installation guide for installing and setting up the network.

APPLICATIONS THAT RUN ON A SMART PHONE OR TABLET. TASKS CAN BE DOWNLOADED TO GUIDE THE USER THROUGH STEP-BY-STEP INSTRUCTIONS FOR SITE WALK, EQUIPMENT PLACEMENT, INSTALL, ORIENTATION AND ALIGNMENT, SECURITY AND POWER. FIELD FORCE APPS SYNCHRONIZE WITH THE WORKFORCE MANAGEMENT AND INVENTORY SYSTEMS IN AN OPERATOR'S BACK-OFFICE TO PROVIDE UP-TO-DATE INFORMATION SUCH AS EQUIPMENT DETAILS, WEATHER AND SITE LOCATION MAPS FOR THE INSTALLER AS WELL AS TO TRACK PROGRESS AND UPDATE THE PROJECT PLAN IN REAL-TIME.



Summary

As networks expand rapidly and become more complex, service providers need to become more efficient. The key to success for network operators is end-to-end process orchestration in planning, network design, project management and network rollout – all enabled by Amdocs Network Rollout Solution.

For more information please contact us at: amdocssoss@amdocs.com



embrace challenge eXperience success

About Amdocs

For 30 years, Amdocs has ensured service providers' success and embraced their biggest challenges. To win in the connected world, service providers rely on Amdocs to simplify the customer experience, harness the data explosion, stay ahead with new services and improve operational efficiency. The global company uniquely combines a market-leading BSS, OSS and network control and optimization product portfolio with value-driven professional services and managed services operations. With revenue of \$3.3 billion in fiscal 2013, Amdocs and its more than 21,000 employees serve customers in over 70 countries. **Amdocs: Embrace Challenge, Experience Success.** For more information, visit Amdocs at www.amdocs.com.

For the most up-to-date contact information for all Amdocs offices worldwide, please visit our website at www.amdocs.com/corporate.asp.