

WHITE PAPER

## **Accelerate the Planning & Rollout of Automated Broadband Services**

Automated Workflows That Dramatically Shorten Lead Times:  
Visionael Workflow Automation Manager

I. Introduction

In the high stakes game of winning over customers by introducing new broadband services, the Planning and Rollout (P&R) process to set up and deliver these services has become an increasingly daunting task for communications service providers (CSPs), as well as the individuals responsible for planning the network changes and the equipment needed to deploy them.

While Local Loop Unbundling (LLU) has certainly opened up opportunities for Competitive Local Exchange Carriers (CLECs) and Wireless Carriers to offer services (e.g., triple play) directly to consumers or local businesses by using an incumbent carriers' local loop, as well as plan more aggressive time-to-market dates for these new offerings, the flipside has been an increased pressure to meet tighter rollout deadlines.

Planning & Rollout (P&R) is now more complex than ever. In addition to thinking about how to provision a new service, CSPs must now also worry about how to optimally either upgrade their existing infrastructures or build them out for the first time. Planning the design of the new network and then rapidly and efficiently purchasing and rolling out new equipment is critical to avoiding the **stiff penalties** resulting from missed delivery commitments.

II. Common Hurdles

Meeting Commitments

CSPs entering new markets or expanding footprints within their existing markets must make commitments for both the start of service delivery as well as the types of services offered. These commitments are usually driven by business reasons and competitive pressures. For new services such as broadband access, IPTV, video on demand, or IP telephony to render maximum return on investment, they need to be available by a certain date. Network planners, therefore, must find an ideal balance between efficient planning, forecasting, and infrastructure rollout to support these new offerings.

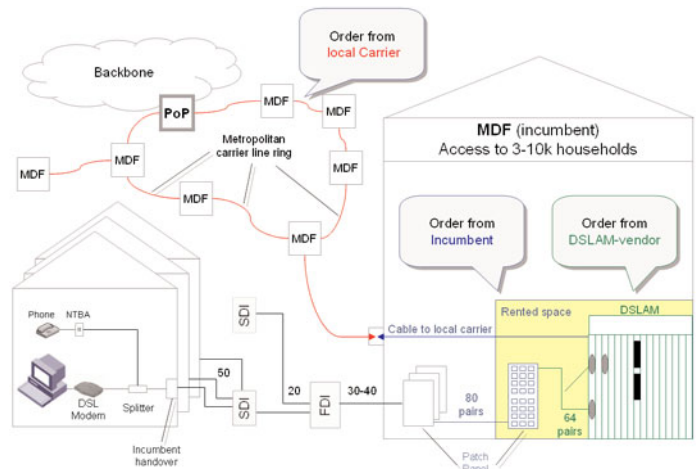
What's On First?

Network planners wax nostalgic about the days when rolling out new equipment meant placing hardware in 300 locations over a 12-month period. When xDSL was first introduced to new markets, its rollout and deployment could be tracked on Excel spreadsheets, email, and small project plans. Equipment purchases and placements were easily manageable when a company only needed to add 25 new locations per month.

However, with the advent of new and exciting multimedia services to the home and office, and the increasing importance of delighting customers in their initial user experience, CSPs have had to improve speed and service quality by extending their high-speed backbones closer to the 'last mile,' compensating for the distance limitations of xDSLs.

Solving that problem, however, only created the next: how do you bring high-speed services closer to the endpoints? For many CSPs, that meant deploying more DSLAMs (Digital Subscriber Line Access Multiplexers) further into neighborhoods.

While DSLAMS effectively increase broadband penetration, they also introduce a new dilemma: How do you manage the exponentially increased number of network elements that need to be tracked and monitored in the P&R of new services? Now, instead of 300 new locations installed over 12 months, a CSP has to manage 1400 new locations over the same time period!



Infrastructure LLU with 3rd-party Carrier

## Where's the remote?

As the penetration of equipment and services moves from the big cities to smaller towns placed further apart, the costs of mistakes in planning rise. Previously, when equipment was in the wrong place, a simple truck roll put it right. Now, with distances further apart, a cable or piece of equipment in the wrong geography translates to human intervention and slower deployments. One incomplete step derails the entire process. Operating expenses rise. Deployments slow. Time commitments aren't kept, tempers flare. Customers leave or don't pay.

## Process Breakdown

For the complexities of today's rollout and activation to be managed successfully, internal processes must be fully understood and documented. But what if processes are constantly changing and being updated as new information becomes available? Deadlines slip. Delivery times change. Resource allocation is not aligned with needs. For many, automating constantly changing processes is too labor-intensive.

## Departmental Silos

Some network planners would argue that it's not the changing nature of the processes, but the lack of communication between affected departments that creates the real problem. If the Network Department doesn't speak to the IT Department and their interlinking processes aren't fully understood, let alone documented start-to-finish as orders move from department to department, people within the departments have no idea how their work impacts or fits into the overall workflow. At one CSP we worked with, three different departments claimed that "the process starts here." When departments can't even agree on process, it becomes impossible to improve that workflow, much less automate it.

## Productivity Costs

A workforce constantly stuck in fire-fighting mode isn't productive. People are pushed to react to and fix problems as they occur. Frustrations run high. Turnover increases and knowledge is lost. Mistakes are repeated.

## Financial Stakes are High

Multiple millions of dollars can be spent on a CSP project months before it produces any revenue. Often, it takes 7-9 months between equipment purchase and service activation. The carrying costs are high, the financial risk is even higher.

To make this all work, some CSPs have resorted to ordering large batches of equipment and inventorying it so that there's no problem when it comes time to actually deploy the equipment. But what happens when the wrong equipment is ordered and needs to come from the CLEC?

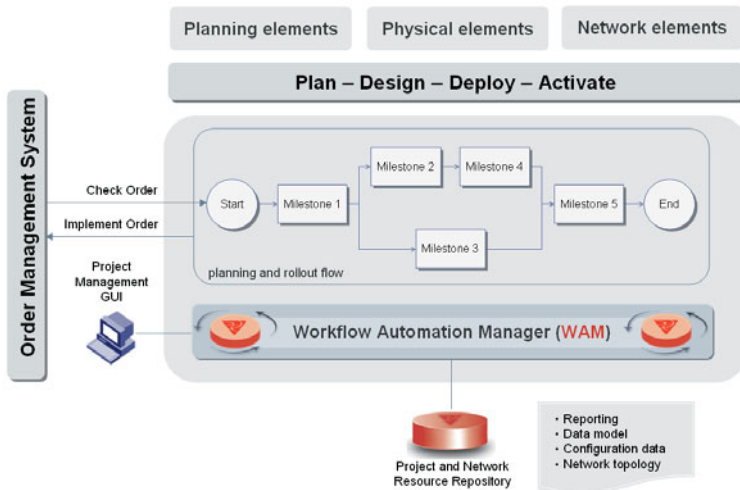
## III. Visionael Eliminates the Pain of Rapid P&R

For 15 years, Visionael has been helping many of the world's leading service providers and enterprises find solutions to these and other similar problems. We know and understand IP networks. The Visionael Milestone Automation management process addresses these challenges head on.

For CSPs, the Visionael Workflow Automation Manager addresses P&R workflow needs. Starting from their ideal network vision, teams of planners can collaboratively map out the intended network design, make changes, and publish the final network design—down to the board level, cable tracings, and plugs required to actually rollout the equipment.

Knowing exactly what, where and how you want to deploy saves time and eliminates frustration. Summary views allow for purchase order lists to be developed and changed as network designs change, or rollout locations get moved up or down in priority.

Additionally, the Workflow Automation Manager documents, fully and accurately, the workflow of all processes involved. Working collaboratively between departments—even for the first time—dependencies and problems can be identified, addressed, and resolved. The software adapts as your organization learns. Visionael Workflow Automation Manager is fully flexible, allowing ongoing refinements to be made easily and published.



*Workflow Automation Manager leverages the Repository to support highly granular processes — storing and tracking a myriad of details for each location, device, and/or project.*

The results are measured in higher confidence around project milestones and service delivery, reduced pressures and last-minute scrambling, met or exceeded target dates, and improved employee satisfaction. Managers can easily and quickly pinpoint exactly where they are in any given project. Visionael Workflow Automation Manager ensures critical details aren't glossed over, since the system understands and encompasses the entire workflow and generates reminders and alerts at milestone junctures.

### Customers Have Found Visionael Indispensable

Recently, Visionael began helping an important European CSP address the concerns common to many P&R deployments. Here are a few highlights:

- Planning and forecast groups identified all network equipment elements and forecasted their purchasing requirements with 100 per cent accuracy.
- As plans changed or schedules were modified, the dates of all required network elements and people were modified accordingly. This allowed the CSP to order equipment when needed, reducing expensive outlays and costly inventorying of large numbers of switches, DSLAMs and DSL modules.

- Workflow spanning seven departments was fully documented. A team consisting of members from across the company was able to continually improve the workflow, eliminating mistakes and reducing overall stress and time requirements.
- The workflow is highly flexible and can be modified as new information is gathered, as different procedures are implemented, or as the organization learns.

After only a couple of months in operation, this CSP expects to reduce the lead time-to-market for new services from 20 to 15 weeks.

### About Visionael

Visionael Corporation provides best-of-breed software and services that allow telecommunications service providers, network outsourcers, enterprises and government organizations to automate the rollout of network services over IP networks and to accelerate time-to-revenue or productivity. With Visionael software, network operators can more quickly design, provision and activate next-generation services—including voice, data, mobile and video offerings—all while reducing the complexities of managing large, advanced networks.

The company has an extensive worldwide customer base, including Alpheus Communications, Comcast, EDS, Kaiser Permanente, IBM Global Services, Sprint and Vodafone. Channel, system integrators and other partners include Dimension Data, EDS, IBM Global Services, Logica and Pride. Visionael is a privately held company, headquartered in Mountain View, California, with major development facilities in Tulsa, Oklahoma, Bangalore, India, and Gothenburg, Sweden. Sales offices are located throughout North America and Europe.

For more information about Visionael, please visit [www.visionael.com](http://www.visionael.com) or call +1 (650) 963-0960.

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