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# BUILDING FOR TODAY, INVESTING FOR TOMORROW

**“When we build, let us think that we build for ever.”** – John Ruskin

The great builders of the past created impressive structures using human strength and innovative tools and techniques to augment them. Think of the pyramids of Egypt—massive stones pulled up ramps by thousands of workers. Or the cathedrals of medieval Europe—master craftsmen deploying their skills with wooden cranes, pulleys, and ropes to raise towering edifices of stone high into the sky. Building always started with a plan, but much of it was done on the fly, as the master builders relied on their experience and the skills of their workmen to bring the pieces together into a work of power and beauty.

In the first paper of this series we discussed Juniper Networks’ overall networking lifecycle with its three stages—Plan, Build, and Operate. The second concentrated on the Plan phase.



## PLAN

Assess, design and plan your network.



## BUILD

Deploy your new or upgraded network and security system.



## OPERATE

Keep your network up and running.

The Build phase focuses on deployment of products in test and production environments. This includes migration from your existing environment, integration into your new environment, installation and configuration, system test, and system bring-up. All, you hope, without disruption. This is the phase in which you first deal with the specificities of the

Now, let’s examine the Build phase. In our opinion, the Build phase is much more than deploying new devices into your network. It’s also about equipping your organization with the skills, tools, and techniques that enable you to maximize the return on your investment.

When you embark on the Build phase, many of the same principles adopted by the ancients are still of use to you—updated and modernized, of course. You are not likely to have slaves and stonecutters on your team, but just as the cathedral builders brought in expert craftsmen, you, too, want to bring in the best support to augment—and train—your own staff. And unlike building a pyramid in the desert, you probably have something in place already and need to migrate to the new environment.

products you have chosen to implement. You need to bring in experts to ensure you get things right, but you also want to train your staff so you soon have in-house expertise.

Deployment planning involves much more than bolting some boxes into racks and turning them on. In a large project you need to plan reception and staging of the equipment—in many cases

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setting up test environments to ensure that when tied together in a network, the devices act as you expect them to. There is also the issue of migration—usually new devices replace old ones. Replacing the old with the new

without major disruption requires top-notch planning and discipline. Your objective should be the same as the ancient Greek physician Hippocrates: “First, do no harm.”

## Engaging Specialists Has Distinct Advantages

When you deal with advanced technologies, “do no harm” can sometimes be easier said than done. Successful migration requires a detailed understanding and use of appropriate plans, skills, and processes that are necessary for the change. Previous experience is a crucial advantage, which is why many organizations engage specialist partners to assist in the Build phase. This is also the time to invest in training for your staff so they are confident and effective in implementing your new technology. But how does this work in practice?

Let’s use the Juniper approach as an example. Juniper Networks® Professional Services consultants are experts in the techniques required to develop, design, implement, and migrate to a robust and secure network environment that meets your specific needs. They call on their practical experience to add

start-up expertise to your team. For instance, [QuickStart services](#) are designed for customers who have not previously used specific Juniper products. They provide the expert assistance of an on-site Professional Services consultant who advises and gives guidance during your initial implementation. At the same time, our consultants share their expertise and bring your teams up to speed, enabling them to perform further deployments on their own. For somewhat more extensive projects, packaged services provide focused engagements using standardized methodologies. And, should it be required, Juniper can always provide bespoke services tailored to your specifications. Whether you engage through a standardized or customized package, all our Professional Services teams adhere to the Juniper Project Management Methodology (JPMM), described in the second paper of this series on the Plan phase.

## Getting the Most Out of the Build Phase

In our experience, organizations that get the most out of the Build phase are those that invest in training their staff. For projects with Juniper Networks products, our Education Services team and their Authorized Education Partners can train and certify your staff, ensuring they have the knowledge and skills needed to develop and maintain high-performance networks. Our customers demand a wide range of courses and also require us to be flexible. That’s why we have a mix of instructor-led and online courses, and

our curriculum is integrated into the Juniper Networks Certification Program (JNCP) that validates the technical skills of your professionals on Juniper Networks technologies.

But what if your staff is already confident in an IP networking environment and just needs to learn the specifics of Juniper Networks Junos® operating system? For them, we’ve created a Fast Track Program to get them started on Junos OS and quickly earn their certifications. There’s also a set of free-of-charge online classes that give experienced professionals just

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what they need to bridge the gap from what they already know to being comfortable with Junos OS. More information can be found at: [www.juniper.net/us/en/training/fasttrack](http://www.juniper.net/us/en/training/fasttrack)

In conclusion, the Build phase is not just about getting the technology correctly integrated and migrated—it is just as much about your people. Investing in them at this stage benefits your

operation throughout the rest of the networking life cycle of your project, and for many others as well.

This is the third in a series of five short papers on how to effectively manage your network project lifecycle. The other papers in the series can be viewed at: [www.juniper.net/uk/en/serviceprovider/customer-services/](http://www.juniper.net/uk/en/serviceprovider/customer-services/)

## Juniper Customer Services and Support

The Juniper Customer Services and Support team consists of more than 1,800 Juniper support personnel and over 1,000 consultants within our partner community. Our global Professional Services team alone consists of

more than 200 senior-level consultants, each with an average of over 10 years' networking experience within multiple industries. For more information, visit: [www.juniper.net/uk/en/serviceprovider/customer-services/](http://www.juniper.net/uk/en/serviceprovider/customer-services/)

## About Juniper Networks

Juniper Networks is in the business of network innovation. From devices to data centers, from consumers to cloud providers, Juniper Networks delivers the software, silicon and systems that

transform the experience and economics of networking. The company serves customers and partners worldwide. Additional information can be found at [www.juniper.net](http://www.juniper.net)



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