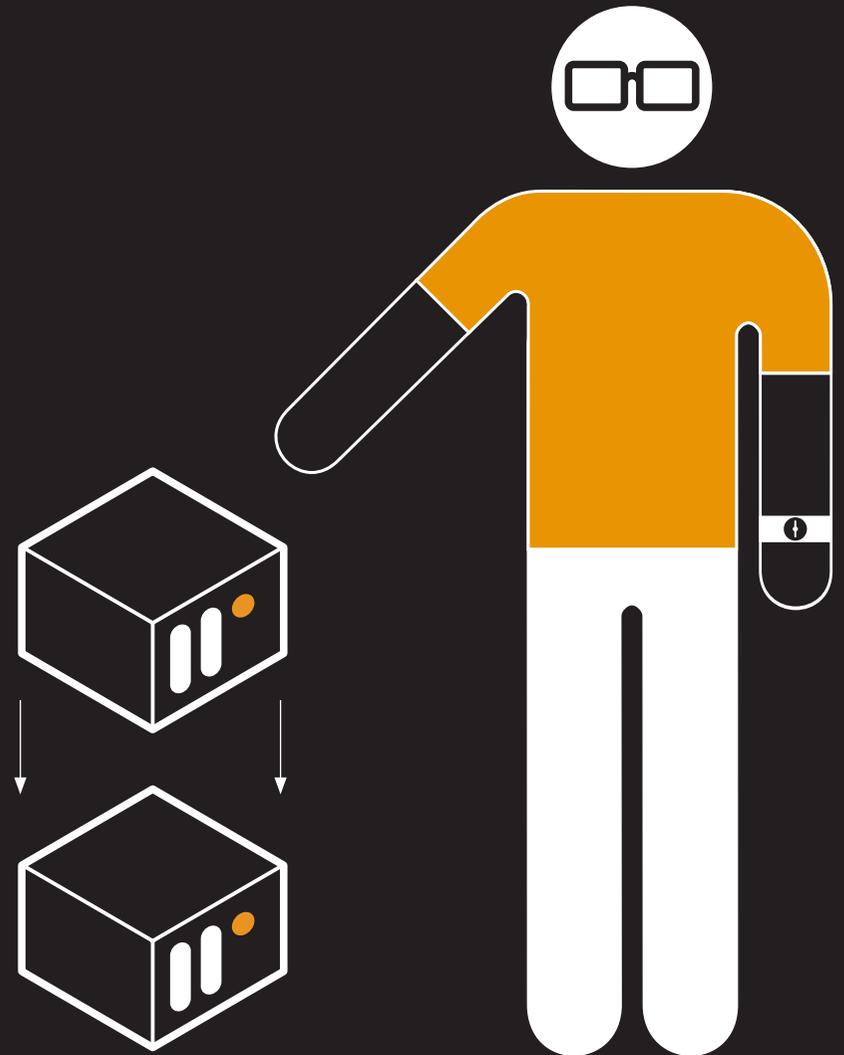


How to Build an All-Star App & Desktop Virtualization Team

Giving the right skills to the right people

CITRIX[®]
Services





It's all about the team.

You're mobilizing your organization by going from physical desktops to virtual ones. Makes sense.

You've done big IT projects and migrations before. But this time, it's a little bit different. Because, this time, you're not just deploying a new technology, you're pioneering a whole new model for the way IT gets delivered to the business.

At Citrix, we've seen thousands of companies make this transition and they never look back. Virtual apps and desktops provide so many compelling benefits that the destination is always worth the journey.

But some app and desktop transformation projects are smoother than others. And in our experience, the difference almost always comes down to the team: to the people who design, deliver and maintain the solution; and to the skills they have when they go into the project.

That's what this eBook is all about: helping you to build the best possible team for your app and desktop virtualization journey.

As an Education organization, we're big believers in rigorous, hands-on training delivered by experts who know virtualization inside out. But that doesn't mean every member of your team needs to get the maximum amount of formal training.

If you know the skills you need in your team, you can target their training, accelerate your projects and keep costs down, too.

Enjoy the eBook and do let us know about your own experiences with teams and skills.

The Citrix Education Team



What good looks like.

A great app and desktop virtualization deployment ticks three big boxes:

Users love it.

You deliver a great user experience and people are happy to adopt it.

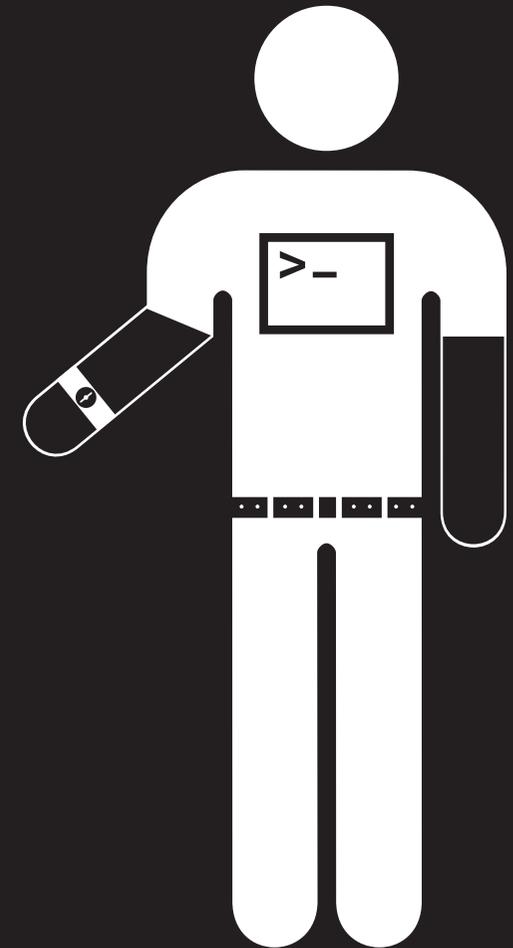
The project goes smoothly.

You deliver on time, within budget and with no pain.

The environment rocks.

With impressive performance, availability and security.

That's the target, now let's look at the people and skills you need to get there...



The Four Competencies

When you take your company to virtual app and desktops, you're doing four main things:



Prepare

Explore the opportunities that virtual app and desktops offer, and get the key stakeholders to agree that virtualization is right for your organization.



Deploy

Install and configure the hardware and software according to the design.



Assess and Design

Analyze your business and your user needs to make sure you design and deliver the right solutions to the right user groups. Then build the architecture to match.



Support

Keep the environment running at peak performance, keeping it up to date – and keeping users happy.

Each of these competencies calls for a specific set of skills. Let's drill down a bit...

The Desktop Virtualization Skills Map

The skills your people will need for each competency

Assess and Design
Assess 

Evaluate business, users and technical needs

Document and prioritize key business drivers

Gather data on users, applications, devices and the infrastructure

Assess application compatibility and hardware suitability for supporting virtual workloads

Segment and prioritize the user base

Assess and Design
Design 

Determine application and desktop delivery strategy for each user segment

Design the user, access, desktop, control and hardware layers

Propose hardware, storage and integration plan

Estimate detailed costs and timeline

Recommend optimization opportunities

Communicate and document all of the above

Prepare 

Build a use case based on business needs

Demonstrate the technical solution to stakeholders

Evaluate the success of the Proof of Concept

Communicate with stakeholders to get buy-in

Success

Support 

Maintain and update the environment

Troubleshoot any problems

Monitor performance

Back up the environment

Prioritize and escalate issues

Create historic baseline reports

Deploy
(Depends on what you deploy, but may include any or all of the following) 

Install and configure the hypervisor layer components

Build the core directory structure and database components

Install and configure the desktop layer components

Test the implementation

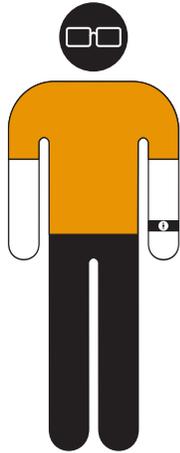
Train the support staff

Run a pilot

Roll out the solution to end users

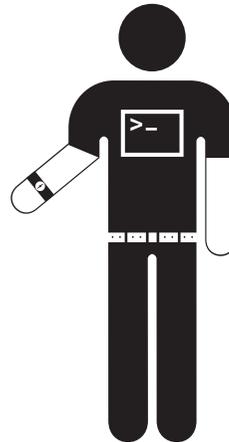
The three main job roles

The size of your project team will vary by the size and complexity of your deployment, but there are three primary job roles you'll need to fill:



The Designer

Frequently known as the Architect or Consultant, this is the person who designs the solution to suit your business, user segments and application estate. This role can play a key part in the Prepare stage and will be responsible for the Assess and Design stages.



The Builder

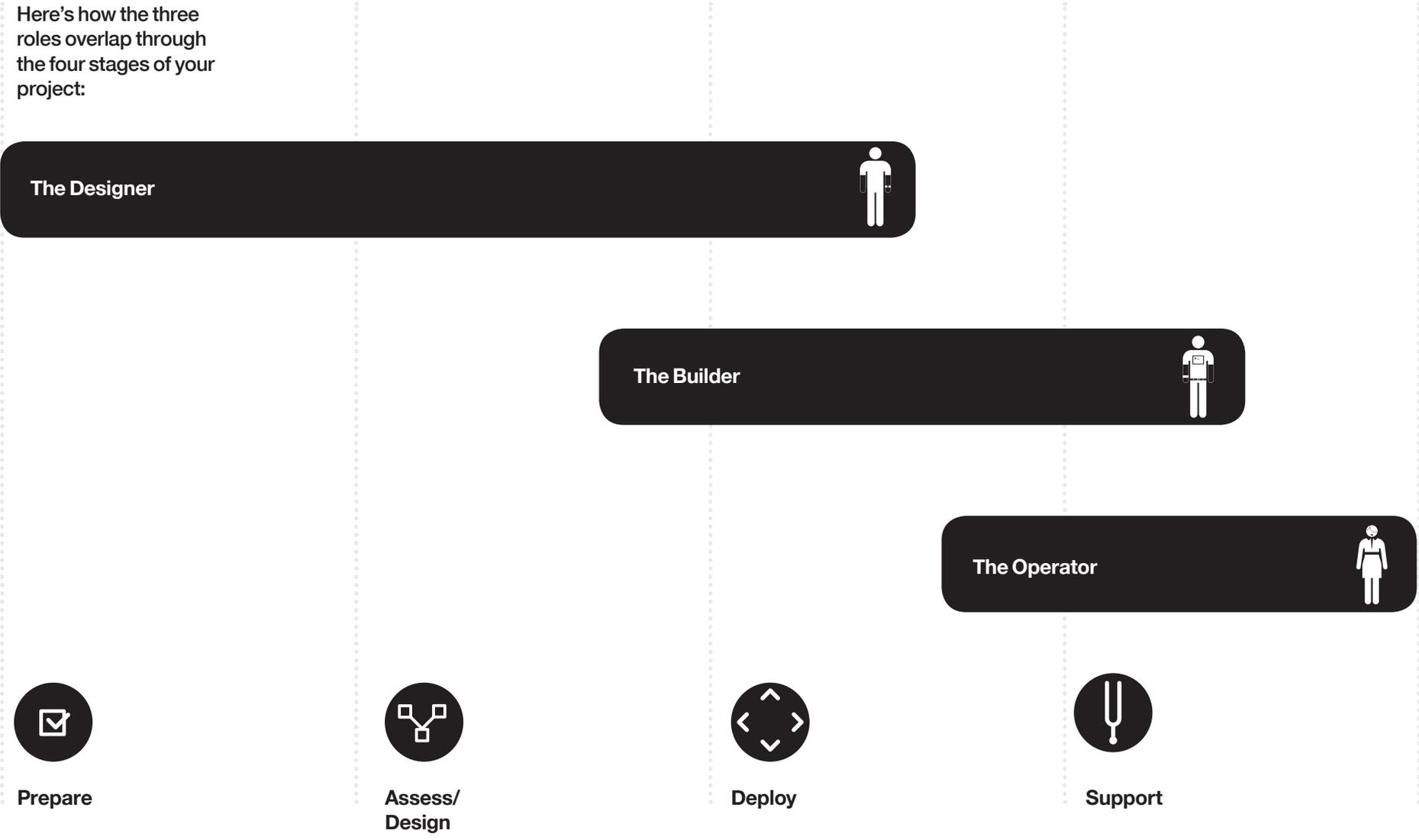
Usually known as the Engineer or Consultant, this is the person who builds the solution that the designer created. Including configuring all hardware and software and integrating it with your wider IT infrastructure



The Operator

Known as the Administrator, this person administers and provides internal support. Keeping everything running properly and all the users purring like kittens.

Here's how the three roles overlap through the four stages of your project:



The Soft skills

The hard skills listed in the Skills Map are critically important. But too many project leaders ignore the softer skills that also play a big role in the success of any project.

Essentially, every app and desktop virtualization project has a change management program built in.

And that's where the soft skills are so important: so that you bring your stakeholders and your users along with you every step of the way.

Here are some of the important soft skills that the people responsible for each competency should have:



Prepare

Being able to keep your stakeholders and users informed and motivated from the start.

Skills:

Listening, business savvy, clear communication

Qualities:

Diplomatic, business-like, positive and practical



Assess and Design

Throwing clear light on your business, your users and your applications, and translate that into architecture and solution decisions.

Skills:

A process person, understands how people use IT, can summarize complex needs in simple language, tech 'chops'

Qualities:

Rigorous, detail-oriented, user-focused, polymath, gets on well with specialists



Deploy

Turning the designs into a live environment.

Skills:

attention to detail, natural documenter, voracious learner

Qualities:

methodical, rigorous, genuine interest and passion



Support

Making sure the deployment runs like a Swiss watch.

Skills:

Thorough understanding of the tech, a proactive maintenance mindset, knows when to ask for help, great at desk research

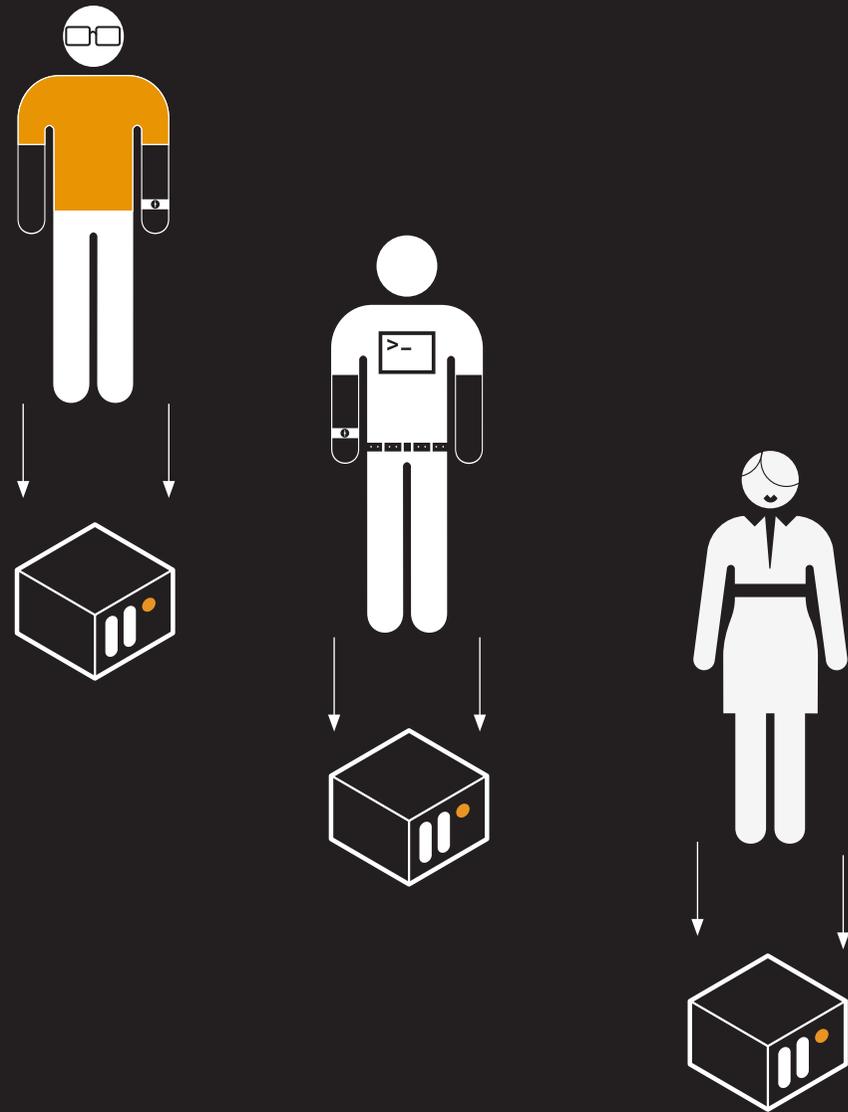
Qualities:

Natural troubleshooter and bug-fixer, sense of urgency, great with people, patient

The Principles of Building an All-Star Team ★

So those are the competencies and skills you'll need on your team.

Now let's look at some of the key principles that make for successful app and desktop virtualization project teams – including some quotes from Citrix professionals who have led successful projects and build great teams.





All-Star Team Principles

Find people who love this stuff.

Moving to virtualized apps and desktops means creating a new culture and mindset.

Find people who love this stuff; who are enthusiastic about learning it; who understand the benefits; and who have an attention to detail. Skills can be taught. Attitude can't.

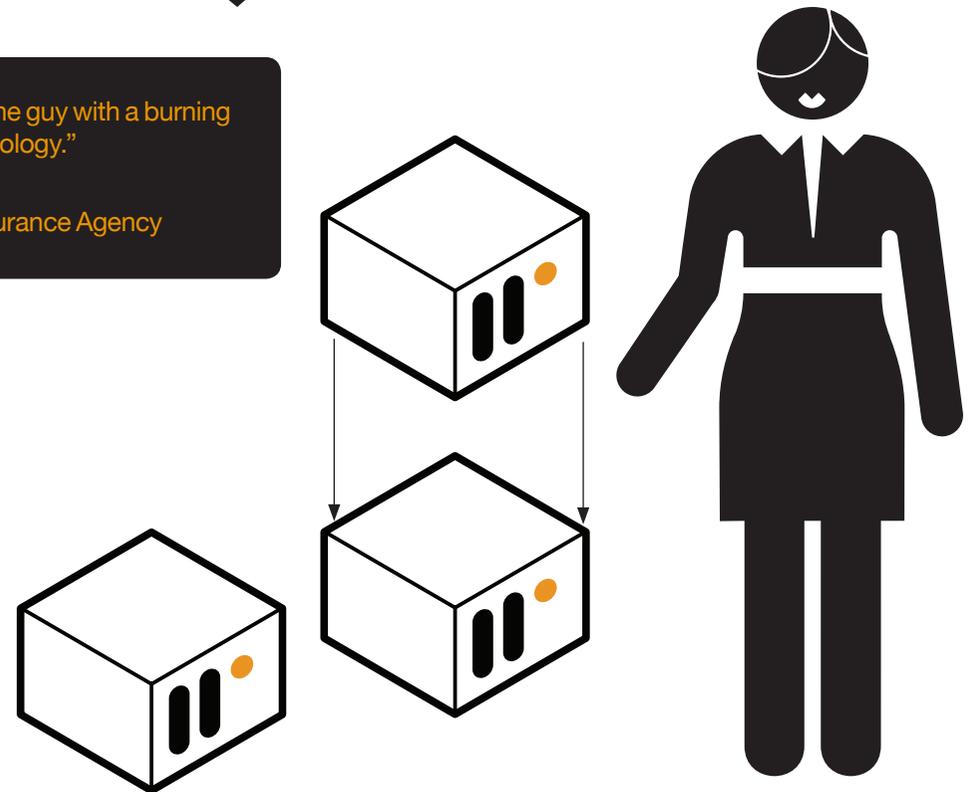
And beware of 'blockers' who struggle to let go of the traditional mindset so they can embrace the virtualization model – they can sap momentum and morale.

"You need at least one guy with a burning interest in the technology."

Emil Tibblin,
Swedish Social Insurance Agency

"The number one challenge is to find people with an attention to detail. This is complex technology – sloppy deployment processes won't work."

Government IT Manager





All-Star Team Principles

Create a learning culture.

In the physical IT world, there was less standardization and a higher tolerance for unique, local fixes.

With virtualization, more has to be standardized and centralized – so you need to capture best practice and share it.

That means finding natural documenters, then creating a culture that captures learning, shares it and codifies all processes.

Some project teams make sure that, as soon as someone gets back from a course, they take their colleagues through the key ideas they learned.

Others create a digital library for all documentation, designs, decisions and processes.

“With Citrix, you can scale out to, say, a hundred servers in one data center. That means you need standardization and that means solid processes.”

Government IT Manager

“It required a lot of training and a lot of documentation to get [our engineers] to understand how to manage their virtual discs correctly. We had to get a lot of click-by-click, step-by-step documentation on how to update the discs, seal them up and get them back out.”

Jason Moss,
HCA Healthcare

“We create a digital library with all designs and documentation – kind of an engineering cookbook. And we regularly invite the teams to review it so they can cascade their learning.”

Soo-Saek Edelmann,
B-Source SA



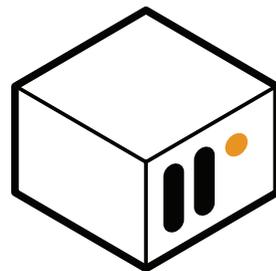
All-Star Team Principles

Break down the walls.

App and desktop virtualization touches every IT discipline. Silos of expertise were okay in the physical world but they don't work in the virtual one.

Get early input. Hold chalk talks every few months to show the other teams what you're up to. Err on the side of over-communication.

You need the network, server, application, security and storage teams on board. That means you need to foster open collaboration and communication across all teams and disciplines.

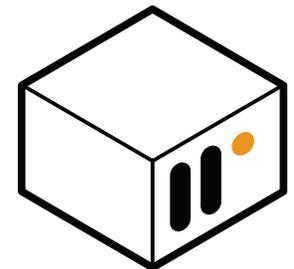


“Get the network and SAN guys in early. Server miscalculations can be solved with build-out. But projects that hit the rocks tend to screw up here.”

Emil Tibblin,
Swedish Social Insurance Agency

“App and desktop virtualization means collaborating. You need people who can work with people.”

Soo-Saek Edelmann,
B-Source SA





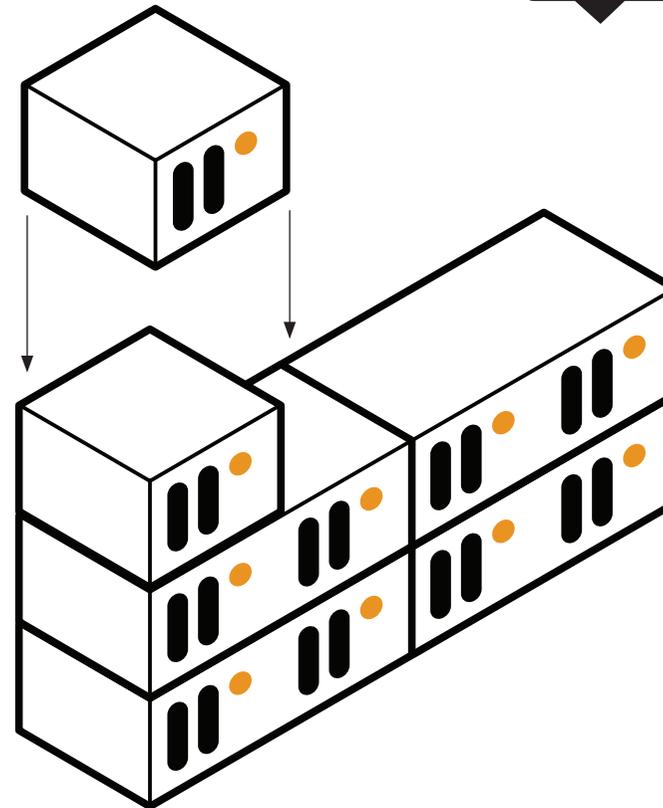
All-Star Team Principles

Get executive buy-in.

It's important to create an environment where your team can succeed – and to get the resources you'll need to get the job done.

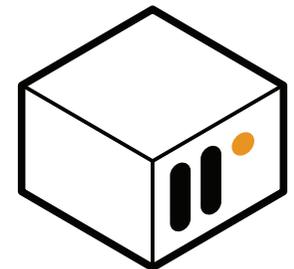
That means getting executive buy-in from the start. Someone on the team needs to make sure the key senior stakeholders are involved, then keep 'selling up' – showing management what's in it for the business and how you're getting there.

With executive buy-in, anything is possible. Without it, you can hit a wall.



“When we do a real demo, we get positive feedback every time. It's much better to be able to show the technology in action instead of just using slideware.”

Soo-Saek Edelmann,
B-Source SA





All-Star Team Principles

Think about training paths.

Getting your team the right education at the right time is an important part of a successful deployment.

But education costs money. Instead of feeling you have to train up every team member to the highest level, it's best to target your education so that each team member is given the skills they need, when they need them.

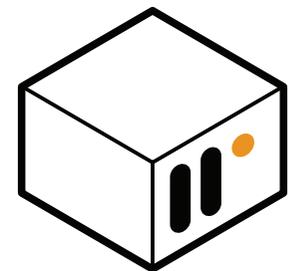
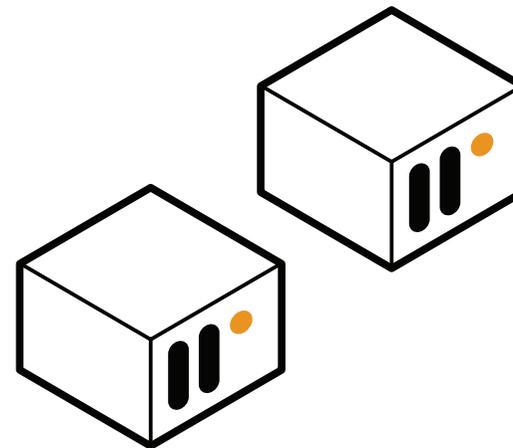
In short: not everyone needs to be a black belt. The leaders may need up to '400-level' courses while the next tier down is fine with '300-level' courses and so on.

It can be helpful to think in terms of training paths, in which everyone gets basic and support training, and further training is targeted as needed.

Turn the page to see a suggested learning path:

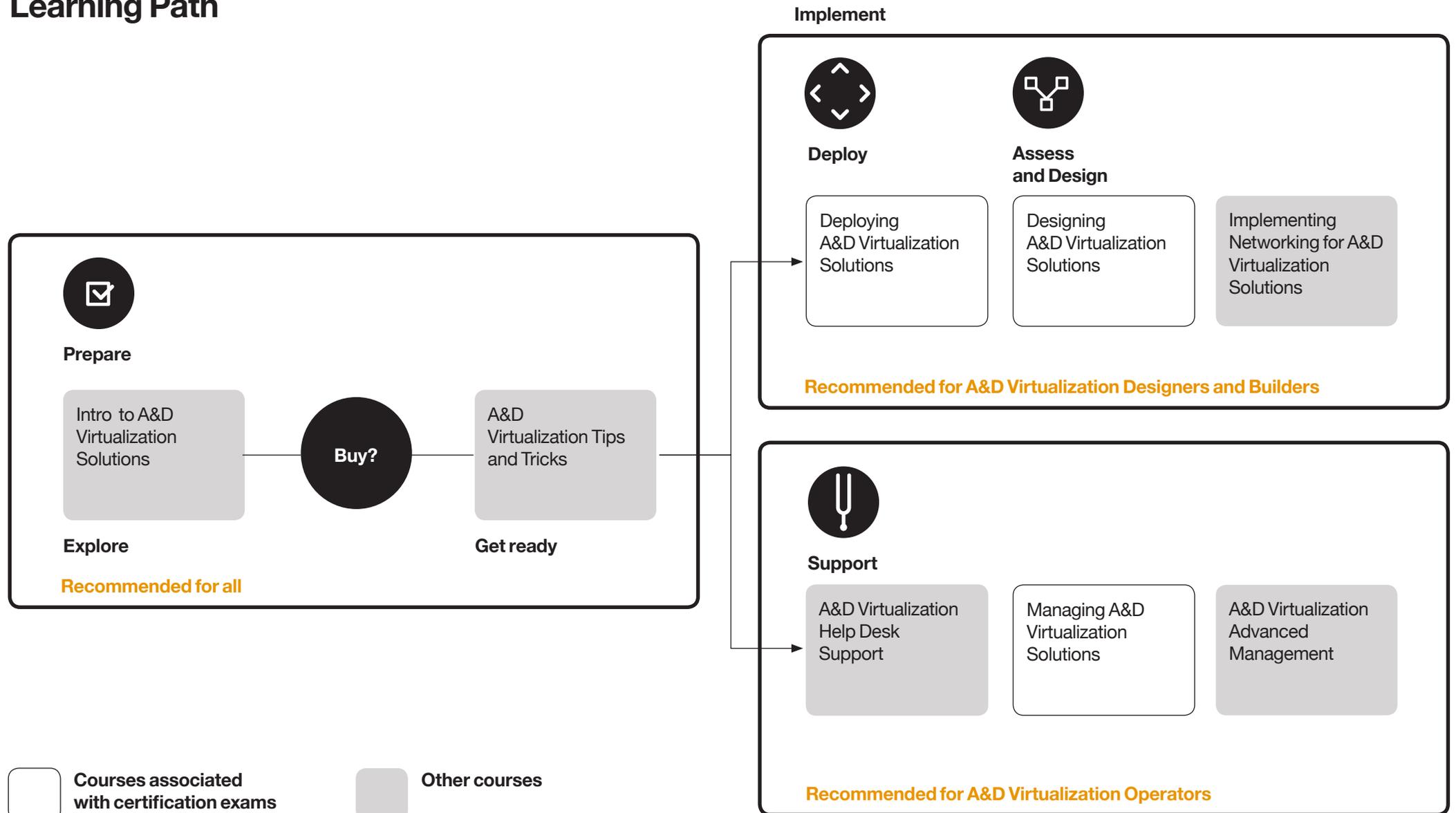
"Ten to fifteen percent of our nearly 15,000 users are virtualized and we're growing that fast. You need people on the ground for that and the existing support people are a great asset."

Emil Tibblin,
Swedish Social Insurance Agency



Apps and Desktops (A&D) Virtualization

Learning Path





All-Star Team Principles

Use certifications to build long-term team strength.

Formal certifications are career boosters and motivators for your best people.

They're also the best way to know that you're building a team on solid capabilities and the most up-to-date skills. Clever managers look hard for Citrix certified IT pros (or encourage those who are close to go ahead with certification) to validate everything they do.

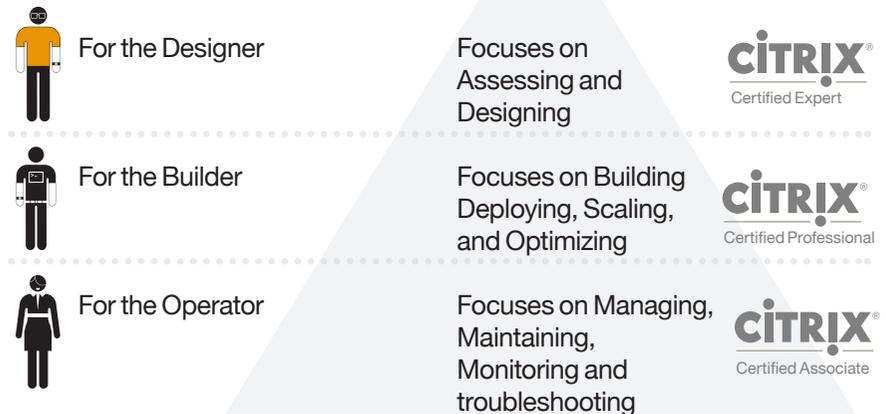
Citrix is building all new certifications around apps and desktop virtualization solutions, addressing all the main jobs discussed.

With tools to help you manage your team's certifications and help your people prepare for exams.

"We have a policy of getting key people one certification per year. It's motivating and it ensures our team knowledge is growing all the time."

Emil Tibblin,
Swedish Social Insurance Agency

New Citrix App and Desktop Solution Certifications



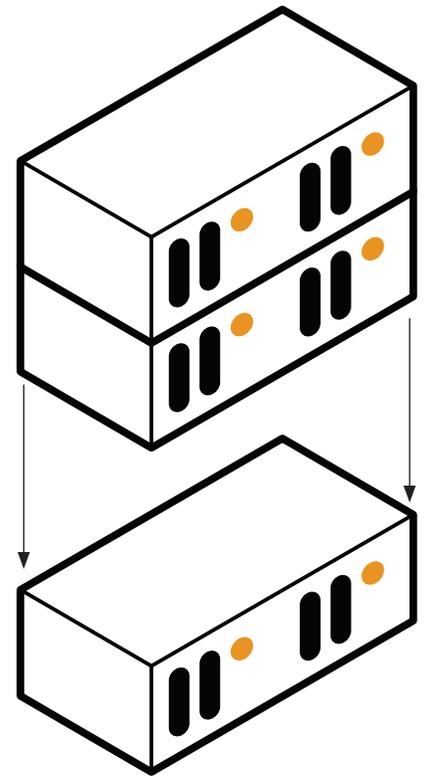
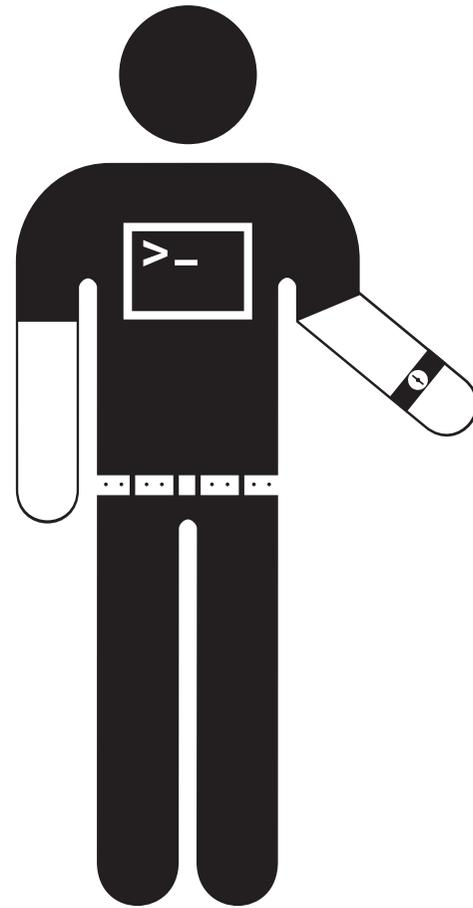


All-Star Team Principles

Up-skill your physical support teams.

The people who support your physical desktops are already great at working with users and solving their problems – but they need to get up to speed on virtualization.

Your field support and helpdesk people are ideal candidates for admin and support roles in your virtualization team – as long as you give them the skills.





All-Star Team Principles

Leverage the free resources.

Not all skills and knowledge-building needs to cost money.

There are many free resources available to empower your all-star team, including:

[The Citrix Knowledge Center](#)

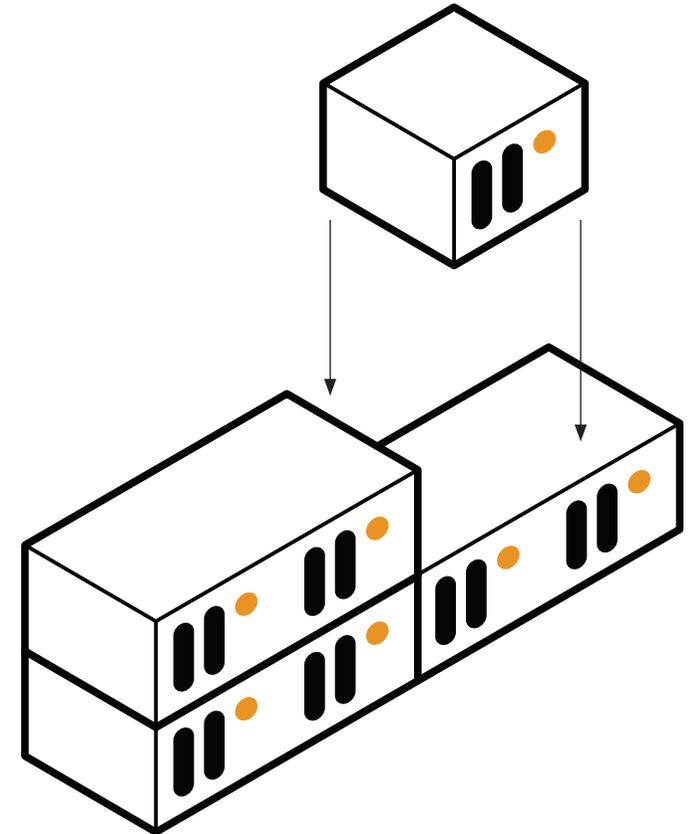
Packed with articles, forums, eDocumentation and reference designs.

[Citrix Auto-Support](#)

The free diagnostic and health-check tool. Upload your log files and get a report.

[Project Accelerator](#)

A comprehensive project management environment. Answer a few questions and you'll get sample designs, hardware sizing and step-by-step project plans.



Conclusion

All-star teams deliver all-star results.

App and Desktop virtualization is one of the biggest changes in IT since the microchip.

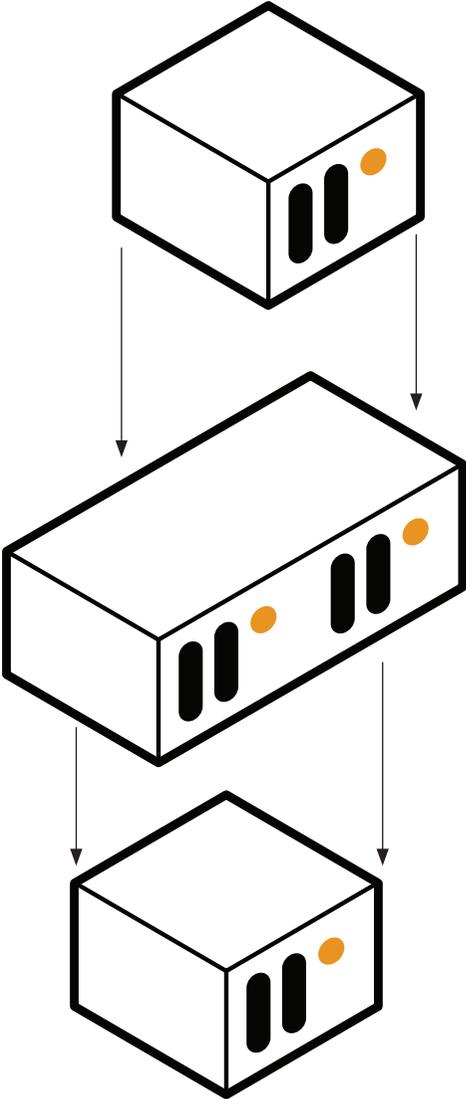
Taking advantage of the opportunity means marshaling your resources and managing a super-professional process that starts with a clear vision and ends with a fantastic deployment and happy users.

We hope this eBook has convinced you that the people on your team – and the skills you give them – are the most important drivers of success.

Invest in them and you dramatically improve your chances of a smooth, successful deployment. ‘Wing it’ and you may just find yourself in over your head.

The good news: it’s never been easier to identify the skills gaps in your team and to fill them with the very best training available.

We hope you’ll get in touch to see how we can help you.





Start Building.

Citrix develops and delivers training and certification that empowers people and teams to successfully design, deploy and manage Citrix Solutions.

We offer:

Training anywhere, classroom or online

Custom training tailored to your needs

Training to get you up to speed on the latest solutions

Training and certifications for every level and project phase

In short, we help you succeed with your Citrix deployments by giving your team the skills they need.

To talk about your training needs and design the right solution, contact us:
<http://training.citrix.com/>

Thanks to:

Emil Tibblin,
Försäkringskassan (Swedish Social Insurance Agency)

Soo-Saek Edelmann,
B-Source SA

Jason Moss,
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