

USER GUIDE

TOP TIPS FOR HOSTING YOUR LEARNING PLATFORM

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1

WHAT DOES HOSTING MEAN?

Totara Learn is a 'web application'. This means it runs on web and database servers. When we talk about hosting your LMS, we are talking about where (with whom) and on what technology these servers are based.

One of the great advantages of web applications like Totara Learn is the flexibility of hosting options available to you.

Different organisations will have different needs. All of them will impact on your hosting choices, including whether you take this on yourself or subcontract all or part of the exercise to a specialist partner.

AVAILABILITY

The relative importance of your system being available to users 24/7, and conversely the level of potential downtime you are prepared to accept in a given period.

SCALE

The number of concurrent users as well as the volume and nature of data they are consuming.

LOCATION

The places from which your users are logging into the system.

SECURITY

The confidentiality of your data and whether or not there are special security requirements.

ACCESS

The extent to which you can make changes to the configuration of your system.



2

WHAT ARE MY HOSTING OPTIONS?

When choosing a hosting option, the most important decision is whether you want your system self-hosted (run by your internal IT team) or hosted by a Totara partner. Which route you take will affect the different aspects of getting and keeping the system up and running. An LMS is a critical application for many organisations, so you need to trust whoever has this responsibility. Choosing a good hosting provider means you need to consider logistics (where is the system hosted? How much storage is available?), as well as maintenance (who will be responsible for ensuring the stability of my learning platform?). You need to make sure the hosting provider or IT department has a sound track record. The party you select to do this will provide you with the support and technical ownership that your Totara Learn requires to deliver your business' learning objectives.

A self-hosted option will make use of your existing IT infrastructure - it will run on your own hardware (servers). You will have further choices about how much responsibility your internal IT team have for managing the application. These choices will come down to the capacity and capability of that team. Hosting on your infrastructure but leaving everything else to a Totara partner is an option you can consider.

If you choose to have a Totara Partner host your platform, you will need to outline clearly what services you want from them. There are two main categories of hosting system:

Platform as a Service

This is where the partner looks after all the technical requirements, including the management of the hardware, but gives your team full access to the platform. This is a very flexible solution where the hosting partner will be able to set it up to adhere to all your availability, scalability and security requirements. This approach suits organisations with dedicated learning and development resources with technical experience.

Software as a Service

This is where you use a Totara Partner or Totara Cloud to provide an LMS that is already partly configured, and you simply log into that platform. Your team will have access to fewer administrative features and it will be on shared infrastructure (servers used by lots of other clients), but it will be cheaper.

One size doesn't fit all. Totara Partners design Totara Learn solutions ranging from sites with 100 users to sites with 4 million users. The hosting architectures are radically different, but Totara Learn is flexible enough to support all types of hosting scenarios.

While Totara Learn will run on MS Windows-based servers, there are performance and architectural constraints that mean this is only suitable for the smallest sites. Linux is a recommended environment, but not every organisation is able to manage Linux infrastructure.

PLATFORM AS A SERVICE

Pros

- Easy setup
- Your team has full control of the administrative functions of the LMS
- Predictable cost
- Upgrades are taken care of for you
- Allows for integrations, e.g. single sign-on (SSO)
- Backups are usually run as part of the service
- 24/7 support

Cons

- Security considerations running on a third party
- May have additional costs for customisation

SOFTWARE AS A SERVICE

Pros

- Easy setup
- Predictable cost
- Upgrades are taken care of for you
- 24/7 support

Cons

- Might only have limited access to admin features
- No customisations
- Integrations can be harder
- Theming is often limited

SELF-HOSTED

Pros

- Totara Learn can be run on your internal infrastructure, which might be a good fit for your IT policy
- Implementation of SSO etc. may be easier within your security requirements
- Your team has full control of the application and source code

Cons

- Your team needs to be familiar with your chosen technology stack such as Linux, Apache, MySQL and PHP
- Need to run upgrades yourself
- Cost will include getting the internal staff up to date with the application
- Need to run backups yourself
- Need internal systems support, possibly 24/7



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WHAT ARE THE ADVANTAGES AND DISADVANTAGES OF EACH OPTION?

The main advantage of self-hosting is that you have full control over every aspect of your learning platform from the hardware up. Organisations who run closed systems for whatever reason may require this level of control. With full control, however, comes full responsibility. If you self-host, you need to maintain the necessary skills and system knowledge to keep your platform working well. While many organisations have IT staff in-house with these skills, they are often separate from the administrators (the learning & development team) and the users of the system. Do your IT staff have time to keep the organisation's mission-critical systems running, as well as the platform? What will happen if things get busy?

what if

Some issues to consider when deciding who should host your learning platform:

SUPPORT QUESTION

If I have a support question, who will I call and what priority will I get?

NIGHT SHIFT

If something goes wrong at 3am local time, who will be awake to help?

EXTRA STORAGE

If I need more storage space for my courses, how long will that take to put in place?

If your internal team can't deliver on these issues to your satisfaction, your best bet is to consider working with a platform hosting partner.

Having a partner host your learning platform means that you can concentrate on delivering great learning to your organisation. You will benefit from having someone who built the system managing it, drawing on their experience of making it work across a range of scales, complexity and implementation challenges. If you select your Totara Partner based on that demonstrated experience, you should expect a service that will integrate seamlessly with your internal systems and teams.

**“WITH FULL
CONTROL
COMES FULL
RESPONSIBILITY”**

4

COMMON SELF-HOSTING MISCONCEPTIONS

1. *If we host it ourselves it will be cheaper*

The cost of hosting comes down to two factors: hardware and time.

If you are using dedicated servers to host your platform, then you need to keep them up and running. This means costs for managing and regularly upgrading hardware assets as well as time spent in administration. An external hosting provider which spreads these costs across multiple customers and as a core part of their business will be able to offer this infrastructure component much more cost effectively.

You should also consider the cost of the time your IT employees spend on hosting. As well as time spent on administrative tasks, staff need the time to both upskill and to prioritise learning platform support.

The typical tasks your IT team would need to perform include:

- Server builds and update deployments
- Backups and restores when required
- Monthly Totara platform update deployments
- Technical investigations of issues (second-level support)

Unless the learning platform is a core application for support, it is unlikely that self-hosting will be cheaper than third-party specialist hosting when considered on a full-cost basis. Organisations usually choose self-hosting for strategic or security reasons, rather than cost.

2. *If it is in the cloud it is automatically backed up*

If your learning platform is hosted in the cloud, you still need to think about a backup plan for the platform and the content on it in case of failure. A cloud provider should have additional 'regions' (groups of servers, often in separate locations) for emergencies. If they don't, and the main servers fail, you'll be in a disaster recovery situation. Ask your hosting partner about failover and disaster recovery.

3. *Hosting our platform from head office will deliver a positive global experience*

A key determinant of the successful adoption of a learning platform (or any IT system with globally distributed users) is speed. If your LMS is hosted in one country but your users are in offices all over the world, those outside the host country will be stuck with a system that works slower for them. You might invest heavily in the design of your platform and the development of engaging content, but if the system works slowly, users will get frustrated and stop using it.

Manage this issue by thinking about network latency, or any delay occurring in data communication over a network. Consider how you will transfer and cache learning content to give distributed and remote users as close to a 'head office experience' as possible.

There are a number of options to achieve reasonable speeds for all users. If you have staff based in multiple countries then you should select your hosting partner based on their ability to deliver global solutions.

5 **GATHERING YOUR HOSTING REQUIREMENTS**

A Totara Partner can help you gather your hosting requirements and suggest alternative options. Before you start though, you might consider the following:

1. HOW BIG WILL YOUR SITE BE?

How many users (total and concurrent) do you expect to access the site and how often? The answers to these questions will have a material impact on the selection of IT hardware (for internal or external hosting) and the type of network configurations you'll need.

2. WHERE ARE YOUR USERS LOCATED?

One country, one region or global? For your more remote users, what sort of IT network infrastructure (internet access and speed) do they have access to?

3. WHAT'S YOUR BUDGET?

Knowing the budget and what you want to achieve with the site can help you decide which hosting option is right for you.

4. HOW WILL YOU SUPPORT YOUR SYSTEM?

What capability and experience do you have to support your own site, and who will provide the expertise you don't have? Here, you should consider site maintenance, monitoring, backup management and patch release management.

5. HOW AVAILABLE DOES YOUR SITE NEED TO BE?

Is your server setup resilient enough? Do you need a hot disaster recovery site? How much downtime are you prepared to accept?

6. HOW SECURE DO YOU WANT YOUR SYSTEM TO BE?

How sensitive is the existing content and that which may be added by users? What privacy concerns do you have and do you have any data sovereignty issues i.e. any requirement to keep content or user data 'in-country'?

7. WHAT SYSTEMS DO YOU NEED YOUR LMS TO INTEGRATE WITH?

This could include systems such as HR, CRM, repositories and more. Ask your IT team if you're not sure - there may be some systems you hadn't even considered.

8. WHAT ARE YOUR SITE CUSTOMISATION REQUIREMENTS?

What do you need to integrate your learning platform with, and are there any customisations/plugins that could add value?



6 **EXAMPLES OF CLIENTS' HOSTED PLATFORMS**

Some good examples of Partner-hosted Totara platforms



NEW ZEALAND CUSTOMS

New Zealand Customs needed a robust LMS which would adhere to the New Zealand Government's strict security standards, but which was easily accessible to their 1,200 staff spread across the country. Their Totara Partner Catalyst worked closely with the New Zealand Customs IT team to maintain their stringent security requirements to deliver an on-premise solution with single sign-on (SSO) for easy access for the dispersed workforce.



HALFORDS

Halfords needed to deliver learning in a more structured format, meaning colleagues and managers could recognise personal and corporate capability levels. Halfords' Totara Partner Synergy Learning hosts their Halfords HUB site, based on Totara Learn, which now delivers learning to 12,500 employees across the UK, Ireland and Asia.



MINDED

MindEd is an open-access learning portal providing vital information on mental health issues in young people, targeted at adults working with children and young people. City & Guilds Kineo's enterprise-level Totara hosting and support ensures that the site performs to the highest possible levels for over 14,000 registered users and over 1.25 million page views since the launch of the LMS in March 2014.



TEACHING MATTERS

Teaching Matters is dedicated to increasing the effectiveness of teaching in urban public schools in the US, working with 200 schools and 1,200 teachers annually. They chose to implement a Totara Learn platform hosted by Envisiontel. Previously, if they wanted to change CSS files on their LMS, they had to host everything themselves. By outsourcing the hosting to Envisiontel, Teaching Matters now has the freedom to change the look and feel of their Totara Learn site with access to CSS and JavaScript.



ABERDEENSHIRE COUNCIL

Aberdeenshire Council employs 14,500 people in a wide range of roles in Scotland. They chose to move from 100% face-to-face learning delivery to a blended learning model, requiring a new LMS to support this new approach. Totara Partner MediaCorp had previously hosted their entry-level LMS, making them the obvious choice when it came to switching to a partner-hosted Totara Learn site. This solution, called ALDO, has had almost 80,000 enrolments to date, with over 2,000 users a month accessing learning content.



TENNIS AUSTRALIA

Tennis Australia needed an enterprise-level LMS supporting the blended delivery of coaching and professional learning programmes to varying internal and external target groups. Androgogic created Bounce, a Totara Learn platform designed to serve coaches, schools, universities and tennis officials. The Bounce platform provided significant cost savings, removed Tennis Australia's reliance on third-party proprietary courseware developers and made maintenance and upgrades much more straightforward. Bounce also received a silver LearnX award in the category 'Best New Technology Implementation - Deployment of a Hosted LMS'.

Self-hosted Totara platforms

Here are some good examples of self-hosted Totara platforms. Each client had their own reasons for choosing this route; however, as previously mentioned, the key with self-hosted is full control over the infrastructure. In each case, they had the setup support of their Totara Partner.



BRITISH DENTAL ASSOCIATION

A good example of a self-hosted Totara Learn is the British Dental Association. They moved their site to in-house hosting with a partner providing full support. This is because they already had the infrastructure in place and wanted to have an integrated authentication platform with their other systems.



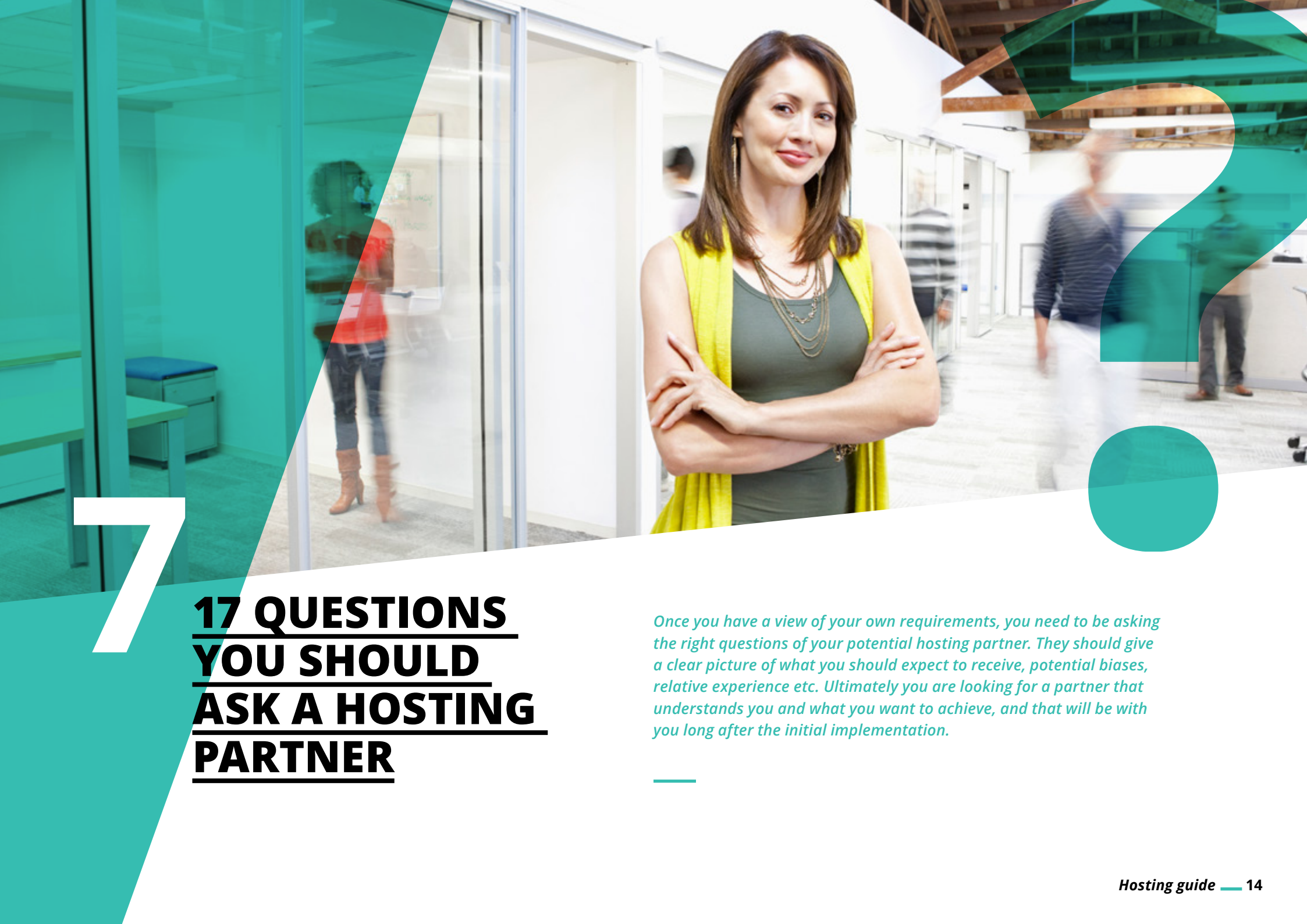
VICTORIA POLICE

Victoria Police set up their systems internally for security reasons. They wanted full control of the servers the systems sit on, and for the systems to be administered by Police staff only. They set up an SLA where the internal IT department can call a partner when required.



THE EUROPEAN RESPIRATORY SOCIETY (ERS)

The European Respiratory Society (ERS) decided that internal hosting was most appropriate, as they already had the infrastructure in place and an internal IT team. They achieved this with the support of their Totara Partner, Catalyst.



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17 QUESTIONS **YOU SHOULD** **ASK A HOSTING** **PARTNER**

Once you have a view of your own requirements, you need to be asking the right questions of your potential hosting partner. They should give a clear picture of what you should expect to receive, potential biases, relative experience etc. Ultimately you are looking for a partner that understands you and what you want to achieve, and that will be with you long after the initial implementation.



1. WHERE ARE THE SERVERS LOCATED?

Some organisations own and house their own servers, some use a web hosting supplier such as Amazon Web Services (AWS) or Rackspace and some offer something in-between. Knowing the physical location of the servers hosting your system will give you an idea of which privacy and data protection laws and regulations will apply to your learning site, and indicate where the responsibility and accountability of various aspects of hosting will likely belong.



2. WHO OWNS THE SERVERS?

Who owns the servers on which your learning platform will be hosted? Will you need to buy your own or will you be able to use existing infrastructure? Will you be accountable for purchasing new hardware or parts when required? How is the decision to update or replace hardware triggered?



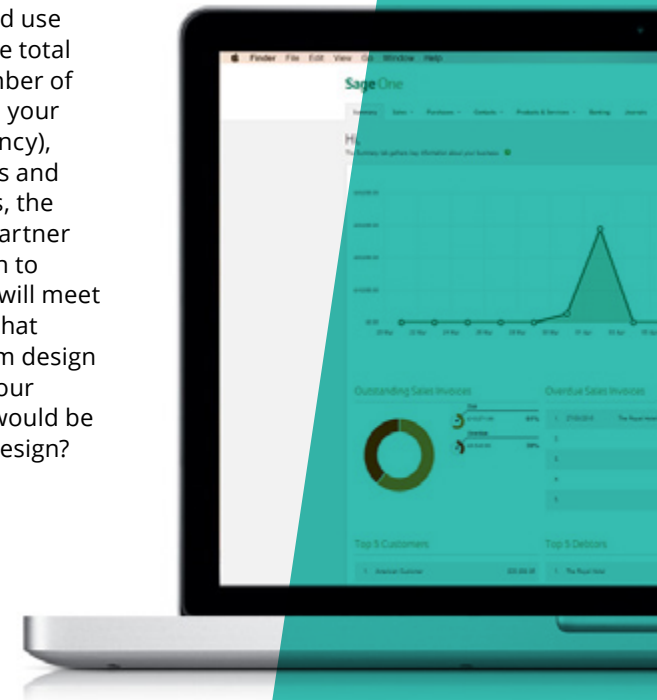
3. HOW WILL WE PREPARE FOR DISASTERS?

A 'disaster' can mean a catastrophic environmental event such as an earthquake or flood, a physical event such as an explosion or power outage or something more localised like public transport outages which limits the availability of onsite technical staff. What are the estimated times for disaster recovery (DR) and what steps are taken to mitigate and prepare for outages for these different 'grades' of disaster?



4. WHAT ARE YOUR RECOMMENDATIONS FOR THE INFRASTRUCTURE DESIGN?

If you can provide some high-level detail around the intended and expected use of your site such as the total number of users, number of concurrent users (and your definition of concurrency), location of these users and your DR requirements, the prospective hosting partner should be in a position to provide a design that will meet your requirements. What would be the minimum design required to support your requirements? What would be their recommended design?





5. WHAT ARE THE SERVER SPECIFICATIONS?

Will the memory and storage limits be sufficient for your organisation's intended use of the site? It can be tempting to throw a lot of RAM and large hard disks at your infrastructure design; however this can drive up your initial, and potentially, your ongoing costs. Consider what you'll require for your first year, second year, third year etc. - you can typically increase the specifications of your hardware if required.



6. WHAT IS THE SYSTEM SECURITY LIKE?

What are the physical security measures in place within the data/server centre? What are the access restrictions, policies and practices around system and application access? Do the data security and protection policies in place meet your security standards? What sort of system and application security monitoring is in place? It is essential you have confidence that your server, site and users are safe and secure, with levels of proactive protection appropriate for the types of information stored within your site.



7. HOW DOES THE BACKUP PROCESS WORK?

Knowing the backup schedule for your site will allow you to manage the expectations of your stakeholders should you need to restore or rebuild the site from backup.

How often is the site backed up? What time of day is the site backed up? What is included in the backup? Is there any information (such as configuration changes) that is not included? Where are the backups stored? How long are backups stored for? What is the process, cost and estimated turnaround time for restoration from backup?



8. WHAT IS THE EXPECTED SITE AVAILABILITY OR UPTIME?

What is the supplier's definition of uptime? There is a difference between the site being 'up' and 'accessible' given a website might be displaying the homepage, but users might be unable to log in. Is there any guarantee around uptime? Some organisations are unable to guarantee 100% uptime as their servers are located within a larger hosting provider; however their supplier might offer an uptime goal or standard.



9. WHAT DOES THE CONTRACT LOOK LIKE?

Is there a minimum contract period? What is the contract renewal process? What does a typical contract look like? Obtaining a copy of a standard hosting contract or Service Level Agreement (SLA) and sending it to your legal team for review early on in the discussion process is strongly recommended. While most organisations are willing to negotiate from their standard agreement, it's worth identifying these areas for review as soon as possible, so both parties have time to consider a suitable compromise.



10. WHAT SORT OF REPORTING WILL WE RECEIVE?

What sort of reporting will you receive with regards to service levels, uptime and unplanned downtime? How often is this reporting generated? What other reporting or statistics are available? Do these reports include all the information you need for your internal auditing and reporting?



11. WHAT CREDENTIALS AND QUALIFICATIONS DO YOU POSSESS?

Knowing your organisation will be working with a hosting provider who has the expertise and experience to support your business goals is vital. While credentials and qualifications such as ISO certifications indicate a level of robustness in processes, they don't necessarily determine whether your supplier is a good fit for your hosting requirements and your organisation as a whole. What are the qualifications and experience of the staff involved in managing your site? Which customers are willing to provide a reference for your prospective provider?



12. WILL YOU HELP US MIGRATE OUR SITE?

If applicable, what will your hosting partner do to assist you with the migration of your site and associated data from another provider, to another provider, or to an internal environment? What is the cost and process of migration? How, when and in which format(s) will they send or receive your data? What are the estimated timelines for this process?



13. WILL YOU HELP US INTEGRATE OUR SYSTEMS?

If you need your site linked to or integrated with another system, you will need to understand how your hosting provider will support data transfer, shared authentication and/or single sign-on with other applications.



14. WHAT SYSTEM PERFORMANCE MONITORING IS IN PLACE?

Does this monitoring cover both site uptime and page load times? What is the alert process where an issue is detected? How are important issues communicated to relevant parties? Knowing your hosting provider has robust, automated processes in place to proactively and reactively detect any issues adds a great level of protection and service to your end users.



15. WHAT IS THE UPGRADE/UPDATE PROCESS?

Factoring in the cost and time of updates and upgrades of the operating system, database, application and any associated extensions/add-ons is vital when comparing hosting provider costs. What is the process and schedule around both essential and non-essential upgrades and system updates? What time of day or night are updates and upgrades deployed? How soon before an update is required will you be notified? How will you be notified when an update or upgrade has been completed successfully? What is the roll-back plan should an update fail or cause unexpected problems? What are the associated costs?



16. WHAT IS THE ADD-ON INSTALLATION PROCESS?

What is the process and policy around installation of plugins, themes/designs or contributed code? Is there a review process prior to installation? If so, what are the costs and estimated timeframes associated with this review? What happens should an add-on fail a code quality or security review? Your hosting provider's primary concern should be your site's safety and security, so checking any new code before implementing it in a production environment should be a standardised process.



17. TESTING

What sort of penetration, performance and load testing will take place on the site prior to launch? If this is not standard, what would be the process and associated costs in performing this testing? Are the results fed into any sort of benchmarking? While knowing this information is certainly helpful, you should consider the cost and time of performing this testing versus the overall benefit of having this information - can you obtain this information elsewhere or from those who have already performed similar tests?



About

About Totara

Totara builds performance management, employee engagement and learning technologies that enable large multinational corporations, government entities and mid-market companies to deliver enterprise-level talent and workforce experiences.

Totara's Talent Experience Platform (TXP) unifies an industry-leading learning management system (LMS), a powerful performance management system and a user-centric learning experience platform (LXP) under a single and highly adaptable architecture.

Totara's TXP and flexible architecture give organizations the freedom to innovate and the freedom to choose.

We also enjoy building honest, collaborative and service-focused relationships with our partners and customers – and are now working alongside them to accelerate how we innovate our products and expand our global reach.

