

ADOPT.

Point of View Paper

Supporting a creative
environment in a changing
infrastructure landscape



AUTHOR: Tom Alonzo, Director of Support

The change in how corporate computer infrastructure is designed, built and maintained over the past five to ten years has been dramatic. This is true across businesses of all types and sizes and those in the creative and media markets are certainly not immune.

The cloud is now the fundamental building block of businesses worldwide. From data storage and databases to servers and networking software, it's a cost effective and invaluable tool. In According to research conducted by Zippia¹, which looked at US companies specifically:

94% of enterprises use cloud services.

67% of enterprise infrastructure is now cloud-based.

92% of businesses have a multi-cloud strategy in place or in the works.

With these dramatic changes has come a host of challenges. These are mostly maintenance issues. Determining how to migrate existing environments, maximizing uptime, increasing system resilience, designing for both flexibility and security. Not to mention optimizing the user experience at the same time. These are just some of the challenges that creative systems administrators face.

STRATEGIC LANDSCAPE.

Systems Administrators and IT departments need to leverage their current knowledge of maintaining on-premises systems in learning the differences and similarities in maintaining similarly designed cloud-based systems and services.

One of the first major steps, especially for those who currently have no footprint in any cloud services or systems, is the migration of their current systems (in part or in their entirety) to the cloud.

This involves significant time in gaining the required knowledge, including solutions available from the various cloud service providers as well as their pricing. The process also involves significant planning and preparation to ensure a successful migration and minimize downtime during the transition.

Once any cloud-services are adopted, keeping them running optimally, reliably, and securely are the next steps. Systems Administrators and IT personnel must now deliver support that typically involves a variety of vendors instead of the traditional 'one-stop IT shop'.

SOLUTION.

To successfully navigate this new landscape, System Administrators and IT departments should focus their priorities. These should focus on reducing risk and creating a system architecture that can be readily supported, easily expanded, properly secured and provide their user base with the performance they expect.

- 1. Fully analyze the current system environment and its configuration.** *What will easily translate to the cloud? What will involve a different methodology? What is the focus of the move to the cloud and how will those goals be best achieved through the system design? Must it be done all at once, or can it be done in phases?*
- 2. Design a new system architecture (fully cloud or hybrid) that best fits your goals.** *Determine what computer elements and services will be required and how best they can be configured. What new skillsets will be needed to both implement and then support this new configuration?*

- 3. Develop a strategy to transition to the newly designed environment.**
Determine the required testing environment so you can ensure that the proposed design will work as specified and expected. Document each step of the testing and migration process in a comprehensive plan and assign personnel and timeframes.
- 4. Establish an on-going support plan.**
This should be complete with all the players involved in that plan (including vendors, in-house departments, etc.). Be sure to include how issues would get raised, to whom and how they might get resolved -- understanding that sometimes it will require the coordination of more than one party.
- 5. Execute the plan as designed.**
Provide time to resolve any unforeseen issues that might unexpectedly arise. Implement the long-term plan designed to support this new environment.

This process is not necessarily purely linear. As you move from one step to another, issues might be raised that may require a look back to a prior step for resolution. It is imperative not to rush any portion of this process and, most importantly, to provide ample time for the entire project to be completed. Failure to do so increases the risk of the entire project unnecessarily.

SYSTEM ARCHITECTURE, INFRASTRUCTURE, AND SOLUTIONS.

Cloud migrations. System integrations. We have knowledge of what works, what doesn't, and what the potential pitfalls might be during the full process timeline:

Analysis of current system design and architecture

Knowing where you are starting from is critical. Here we detail all the vital aspects of the current system such as CPU, RAM, storage, network interfaces. We work with you to

determine what might be underpowered or overpowered, what functionality is working well in the environment, what is not, and identify any potential modifications. Backups, archives are also analyzed. Current Disaster Recovery and Business Continuity (DR/BC) strategies are also reviewed.

Design of new system design including cloud

From the analysis stage, the new system design and architecture is built. What cloud services are available in the proposed cloud service provider environment, and which might be beneficial in furthering the goals of the new system environment. Diagrams and attention to detail are important as each element introduces parameters that might have implications in other areas.

Storage and movement of data

How much storage is required is a critical element in cloud environments and one of the biggest drivers of cost. Finding the optimum storage requirement that provides the best cost-value proposition with the desired workflow is critical. Also, a server-to-user dataflow analysis should be performed to fully understand how users will operate within the new system.

Disaster recovery/business continuance

No system design is complete without contingency of how data can be restored in the event of disastrous data loss. Whether it is replication or object-oriented storage-based backups, a plan must be made and tested. A Business Continuity strategy should be developed to determine how best the company can rebound from what might be a significant outage incident. While Disaster Recovery only addresses protections against data loss, Business Continuity, as the name implies, addresses how best to keep production going in the face of a potential catastrophic incident. Both are vital areas of interest that should be addressed in any plan.

Ongoing support and maintenance

What is to be covered under a support and maintenance plan is vital regardless of what type of systems infrastructure you have. Whether it is on-premises, in the cloud, hybrid or a multi-cloud environment, there must be a safety of procedures, personnel and contracts to address when things go wrong. Whether

the issues are software, hardware, systems, application, network or workflow-related, they must be dealt with in a timely manner according to prescribed policies. These policies must be in place before issues arise.

SERVICE DELIVERABLES.

To engage Blueprintx in this process is both simple and straightforward. It is designed to provide the most open and flexible methodology to fit your needs and your specific requirements. Depending upon the complexity of your environment and/or the scope of your project, this process can take two to six months, with the average engagement being two to three months.

STEP 1: Initial engagement — introduce your situation to us and, if you have one, your initial plan or goal. We will review, at a high-level, your current system and discuss any options, points of specific consideration and other unique requirements you might have or that we might see.

STEP 2: Full discovery — the next step would be to fully evaluate your current system architecture and its components. Your workflow would also be discussed especially anything that might be impacted by any change in the location, speed and access to any potential changed component.

STEP 3: Design and document — we will work with you to design the new system environment and to develop detailed documents outlining the starting and ending points of the work to be done. Each stop that will be required to get to the final design will be noted. All parties must agree on this document before it can be put into effect.

STEP 4: Ongoing support strategy — during the design phase but certainly before implementation, how support will be handled post-project will be discussed. There are several different support models available depending upon a variety of different parameters. These include the components being supported, the hours of support required, the complexity of the environment, etc. Either a standard support plan can be chosen, or a solution customized to fit your specific needs.

STEP 5: Implementation — the plan is implemented. All responsible parties will play their assigned roles and tasks as documented. All phases identified in the document are performed. Any issues that arise will be noted immediately and flagged for remediation and resolution. The same with any last-minute changes to the document. This continues until the entire project task list is completed.

We will be with you every step of the way, providing our knowledge and experience to ensure successful project delivery and that the newly built environment addresses all your goals.

Sources

¹ Zippia. "25 Amazing Cloud Adoption Statistics [2023]: Cloud Migration, Computing, And More"

Zippia.com. Dec. 19, 2022, <https://www.zippia.com/advice/cloud-adoption-statistic>

info@blueprintx.com | blueprintx.com

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