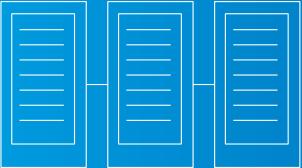
COMMSCOPE®





BEST PRACTICE

1

Understand and communicate IT requirements

YOUR FIRST STAKEHOLDER DISCUSSION IS THE MOST CRITICAL

For a multi tenant data center (MTDC) migration to succeed, the first thing deployed isn't a server rack—it's a discussion about the enterprise's IT requirements. Depending on the kind of enterprise, this discussion may include any number of key stakeholders from within their own organization, including but not limited to the CIO, CTO, Data Privacy/Security office, data center manager, data center planner, data center engineers, facilities manager, IT manager, storage engineers or other roles connected to the daily operation and management of the enterprise's IT structure.

In addition to these internal stakeholders, successful execution of an MTDC migration must also include consultation with seasoned veterans in the MTDC space—often brought in from outside the enterprise since internal staff often lack up-to-date expertise in the opportunities and challenges that come with MTDC deployment. Together, they can complete a thorough and dependable profile of their IT requirements.

REQUIREMENTS TO CONSIDER

Here are some of the likely strategic and tactical considerations that should inform the enterprise's formulation of its IT requirements.

- Current and future state of the data center. This should include the current state of the data center—its load, scale, capabilities and cost structure—as well as the same values projected outward along a three- to five-year plan timeline. The future state should be estimated according to known and anticipated factors like organic growth in the business, the impacts of any M&A activity, consolidation efforts and so forth.
- Network design requirements. This includes how to physically integrate the enterprise's data center with the MTDC. Connectivity, bandwidth and latency requirements will often lead to a discussion of geographical location, which we explore in detail below.
- Map to the MTDC's capabilities. Based on the current and future state of the data center and its network design requirements, a request for information (RFI) should be issued to the MTDC under consideration and any capability or resource gaps between the two documents should be identified and addressed.

The first mistake you can make

One of the earliest stumbling blocks—and one of the most easily avoided—is the failure to include one or more stakeholders in initial IT requirements decisions, forcing late-stage changes that add cost and delay to the migration.

Keep in mind that an MTDC migration is the beginning of a long relationship. It's a process that most enterprises will do only once, and few will do more than a couple of times.

Chances are your enterprise has never done it before and therefore requires specialized insight from a consultant who understands and works with the challenges of MTDC migration every day.



Understand and communicate IT requirements

REQUIREMENTS TO CONSIDER continued

- Geographical location. While physical distance continues to shrink as a limiting factor for offsite data center processing, it does still matter on several technical levels:
 - Latency. This is the "lag" time in response between remote servers. Lower latency means more responsive network connectivity, and many next-generation applications require low latency in order to run at optimal levels. Among other factors, physical distance is an important part of measured latency between the MTDC and outside connections and provides diversity of desired connections.
 - **Connectivity.** Most MTDCs provide connectivity to multiple carriers, but it's important to know if the MTDC under consideration meets your particular carrier's connectivity requirements, offers connectivity to them on premises.
 - Access. How your assets are stored and accessed impacts both management and security. Many enterprises will require a caged environment for their assets that prevents unauthorized access. At the same time, IT management staff must be able to access the racks when needed, which calls into play how far away the MTDC is from the enterprise's location, as well as the hours of access offered by the MTDC. Some offer limited regular hours for access, while others may provide 24/7 availability but charge a premium. The right balance will be determined by these IT requirements.
 - **Data sovereignty.** This is a regulatory question that relates to how different countries govern the handling of certain kinds of digital data. For example, some countries require that any data including personal information about that country's citizens must be stored on physical infrastructure located within that country.



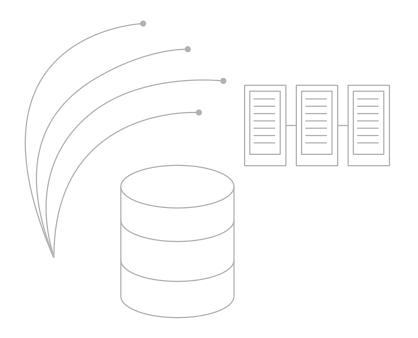
- **Political stability.** A related issue is the political and regulatory variables that may exist in a particular jurisdiction. While this includes the stability of the country itself, it also includes less dramatic but equally important legal issues, such as energy or currency stability, among others.
- Geophysical risk profile. Determination must be made about the suitability (or potential unsuitability) of specific locations with regard to potential geophysical activity like earthquakes, volcanoes, flooding, extreme cold, extreme heat, tsunamis, etc.

IT requirements are the first, crucial step

With the inclusion of all IT requirements across all key stakeholders, we can now move to the next step in the process.

It's important to remember that the first asset put into play during a successful MTDC migration is the insight and expertise of the people who will make it happen.

In the next chapter, we will take a closer look at the planning required to ensure the enterprise's expectations for speed, capacity and economy are met—in good times and bad.



Dig into your IT requirements now or you may end up digging into your real estate later

Knowing your IT requirements is important even if an MTDC migration isn't in your immediate future.

One enterprise that had moved into hosted space realized too late that they had seriously misjudged how much space they needed, and had no contiguous space to grow into. Additional space was available only in an adjacent hall, and they were strapped for fiber connectivity—and had no contiguous space to add it.

Worse, while the network core was in one building and their expansion in another, their existing physical connections were via buried conduit that had to be excavated and extended to reach the newly expanded area.

A better grasp of their initial IT requirements would have led them to pull a larger, highercapacity cable when it was installed, which would have cost very little extra. As it was, however, the only recourse was to spend five weeks ripping up the parking lot to lay the new fiber.

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COMMSCOPE' GET THE MOST FROM YOUR HOST A 10 Best practices for multi tenant data center migratio The purpose of this eBook is to help you gain an understanding of the physical infrastructure, design requirements and strategic considerations that must precede a successful multi tenant data center deployment. For all the advantages possible from a multi tenant data center migration, it's equally possible to realize negative results if these practices are not observed. As a dedicated partner and trusted expert for networks all over the world, CommScope knows how to deploy multi tenant data center infrastructure right-and, unfortunately, we've seen more than once what can happen when it happens wrong. That's why we're putting this information in your hands right now-because your next multitenant data center move is an important one.

For more information on enhancing your data center, reach out to one of our experts now.



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