

information. This will give you a higher level of comfort and confidence to answer the question of *why* one virtual desktop approach is better than another for your company.

Why an Assessment?

As mentioned earlier, being able to answer the “why” questions begins with an assessment of your current applications, desktops, and users. How do you do this? A number of applications are available that perform many of the assessment tasks, and even some of the modeling tasks. The great thing is that these tools are specifically designed to consider all the major technologies outlined in chapter two.

Naturally, you want to know all about these great tools, right? Unfortunately, this is an area that changes so quickly that anything detailed in print here will surely be out of date within a few months. This information is easily available online and, even more importantly, this is a key area to discuss with vendors. Evaluating the toolsets a vendor uses for an assessment can be a valuable criterion for judging the accuracy, methods, and ultimate trustworthiness of their offerings.

For the rest of this chapter, it will be assumed you will use a consultancy to perform your overall desktop assessment. If you plan to perform the assessment in-house, by staffing your organization with experienced virtual desktop employees or by building this skill internally through training programs, the following sections will still be valuable to you.

The focus now is to provide you with a high-level overview of the assessment pieces, and to highlight some of the specific areas through the use of simple examples. This is not a comprehensive assessment approach — that will be provided by the software tools you use and the professionals you hire to perform this work.

Now that you have some understanding about the reasons for assessing and analyzing your current desktop environment, it’s time to begin your assessment. Most assessment tools examine physical desktops, applications and users. Sticking with this organizational

structure, the next section covers analysis of the physical aspects of your current desktop implementation, while the sections that follow discuss applications and users. Note that many of these subjects will be examined in more detail in the next chapter.

Physical Desktop Assessment

Most assessments begin with the physical aspects of your desktops — a hardware inventory and analysis covering components such as memory, CPU, power consumption, storage and network connectivity. This is an information-gathering exercise that involves a data collection system located somewhere on the company network and a set of agent software installed on the end user's PC. The agent software collects information and reports it back to the data collection system over a period of weeks. This data collection is benign and does not affect the user in any way. Two key types of measurements are involved in this information gathering—*total capacity* and *used capacity*.

Total capacity = the total computing capability of the group of users you are assessing

Used capacity = the total capacity actually being utilized

You will find used capacity of current desktop resources is often a fraction of total capacity, and some user types might have significantly higher used capacity than others. Because centralized virtual desktop solutions are typically designed to accommodate used capacity rather than total capacity, the accuracy of the used capacity numbers is extremely important. Some assessment tools can take over a month to gather enough information to provide accurate results.

For example, a finance group might be performing lots of data analysis tasks at month-end, meaning their used capacity of computing resources fluctuates drastically across a period of 32 days. Meanwhile, an admin group could have steady use of computing resources with no fluctuation in resource utilization during this same period.

When considering client-side virtual desktops, a significant difference might exist between the used and total capacity observed in your assessment versus what you plan for in the design phase. This