



**BA104.05 Investigate and address availability, performance and capacity issues.**

Address deviations by investigating and resolving identified availability, performance and capacity issues.

Activities include:

1. Obtain guidance from vendor product manuals to ensure an appropriate level of performance availability for peak processing and workloads.
2. Identify performance and capacity gaps based on monitoring current and forecasted performance. Use the known availability, continuity and recovery specifications to classify resources and allow prioritisation.
3. Define corrective actions (e.g., shifting workload, prioritising tasks or adding resources, when performance and capacity issues are identified).
4. Integrate required corrective actions into the appropriate planning and change management processes.
5. Define an escalation procedure for swift resolution in case of emergency capacity and performance problems.

More information on availability management can be found in section 5.6 Methods Used to Evaluate and Report on IT Resource Performance.

**5.6 METHODS USED TO EVALUATE AND REPORT ON IT RESOURCE PERFORMANCE**

Effective monitoring and reporting of IT resource performance highlights the issues and decisions made to manage IT resources. Without such monitoring and reporting there would be little or no visibility to management of IT resourcing issues that may be critical and for which important management decisions have to be made.

Monitoring and reporting on IT resource performance can be found within the configuration management and availability management processes of ITIL. The monitoring and reporting of these process aspects are described as follows.

**Capacity Management Information Systems**

The CMIS is typically used as a basis of a successful capacity management process.<sup>11</sup> Information contained within the CMIS is stored and analyzed by all the subprocesses of capacity management because it is a repository that holds a number of different types of data, including business, service, resource or utilization and financial data, from all areas of technology. However, the CMIS is unlikely to be a single database, and data typically exist in several physical locations. Data from all areas of technology, and all components that make up the IT services, can then be combined for analysis and provision of technical and management reporting. Only when all of the information is integrated can end-to-end service reports be produced. The integrity and accuracy of the data within the CMIS need to be carefully managed. If the CMIS is not part of an overall configuration management system (CMS) or service knowledge management system (SKMS), then links between these systems need to be implemented to ensure consistency and accuracy of the information recorded within them. The information in the CMIS is used to form the basis of performance and capacity management reports and views that are to be delivered to customers, IT management and technical personnel. Data are utilized to generate future capacity forecasts and allow capacity management to plan for future capacity requirements. Often, a web interface is provided to the CMIS to provide the different access and views required outside of the capacity management process.

The range of data types typically stored within the CMIS is as follows:

- **Business data**—It is essential to have quality information on the current and future needs of the business. The future business plans of the enterprise need to be considered and the effects on the IT services understood. The business data are used to forecast and validate how changes in business drivers affect the capacity and performance of the IT infrastructure. Business data should include business transactions or measurements, such as the number of accounts, the number of invoices generated or the number of product lines.
- **Service data**—To achieve a service-oriented approach to capacity management, service data should be stored within the CMIS. Typical service data are transaction response times, transaction rates, workload volumes, etc. In general, the SLAs provide the service targets for which the capacity management process needs to record and monitor data. To ensure that the targets in the SLAs are achieved, SLM thresholds should be included so that the monitoring activity can measure against these service thresholds and raise exception warnings and reports before service targets are breached.