

Estimating Entire Net-Work Storage Requirements

Given the complexity of today's data processing environments, it is almost impossible to provide methods to predict the exact storage requirements of a software product.

The following tables provides rough estimates about the fixed storage requirements of Entire Net-Work and its various components, ignoring operating system-related storage requirements, which typically vary from installation to installation.

Table 1 contains the amounts of storage obtained from the operating system based on parameter specification or appropriate defaults. It does not include storage areas that are directly related to the operating system, such as operating system control blocks, I/O-related buffers, and control blocks (except where they are part of Entire Net-Work program modules or data areas).

Table 2 contains the amounts of storage obtained from the Entire Net-Work buffer pools by the control module and the various line drivers.

- Table 1: Storage Areas Obtained from System
- Table 2: Storage Obtained from Entire Net-Work Buffer Pools

Table 1: Storage Areas Obtained from System

| Storage Area | | Platform |
|---|----------------------|----------|
| | | z/OS |
| Request queue: (NC parameter+1)*192 | | AS(X) |
| Attached buffers: (NAB parameter*4112) | | AS(X) |
| Entire Net-Work buffer pools * | Asynchronous buffers | AS(X) |
| | Long-term buffers | AS |
| | Short-term buffers | AS(X) |
| | Page-fixed buffers | AS |
| Entire Net-Work trace table | | AS(X) |

| Storage Area | | Platform |
|--------------------------------|-----------------------------------|-----------|
| | | z/OS |
| Entire Net-Work control blocks | general | AS |
| | Node | 48 |
| | Target | 32 |
| | Path | 32 |
| | CTCA DRIVER | 544 |
| | DCAM DRIVER | --- |
| | IUCV DRIVER | --- |
| | TCPI DRIVER | 4KB |
| | TCPX DRIVER | 4KB |
| | VTAM DRIVER | 4KB |
| | XCF DRIVER | 2048 |
| | CTCA LINK | 992 |
| | DCAM LINK | --- |
| | IUCV LINK | --- |
| | TCPI LINK | 1KB |
| | TCPX LINK | 1KB |
| VTAM LINK | 256 | |
| XCF LINK | 2048 | |
| ADAIOR data areas | general | AS |
| | (for trace table, ECB list, etc.) | about 2KB |

| Abbreviation | Meaning |
|--------------|--|
| AS | from address space (private, below 16MB if XA or XS) |
| AS(X) | from address space (private, above 16MB if XA or XS) |

Table 2: Storage Obtained from Entire Net-Work Buffer Pools

| Statistic | Buffer Pool Types | | | |
|----------------------------------|-------------------|-----------|-------------|------------|
| | Asynch | Long-term | Short-term | Page-fixed |
| Segment size | 64 | 64 | 512 | 2KB or 4KB |
| Control module buffer pool usage | | UB | MSG RPLY | |
| Queue manager buffer pool usage | | | BLK | BLK |

| Abbreviation | Meaning |
|--------------|--|
| BLK | Storage for outgoing transmission blocks (after compression and blocking), from short-term pool or page-fixed pool, depending on line driver requirements. Storage requirements for one transmission block include, in addition to the messages contained, 48 bytes for a transmission block header. |
| MSG | All messages sent or received; output messages kept until acknowledged by the access method, input messages kept until processed. |
| | The size of a message can be computed in the following way: 56 bytes for a message header + maxpath * 2 bytes for a node stack + 128 bytes for UB, ACB, etc. + size of FB, RB, SB, VB, IB to send or receive |
| RPLY | A reply buffer for each user request for a target on this node if the information returned by the target will not fit into the original message buffer (that is, if a large record buffer or ISN buffer is to be returned to the user). |
| UB | (only if 31-bit mode:) 64 bytes per user request for a target on this node, for the duration of the Adabas call. |