NAME

scsi_hba_tran – SCSI Host Bus Adapter (HBA) driver transport vector structure

SYNOPSIS

#include <sys/scsi/scsi.h>

INTERFACE LEVEL

Solaris architecture specific (Solaris DDI).

DESCRIPTION

A **scsi_hba_tran_t** structure defines vectors that an HBA driver exports to SCSA interfaces so that HBA specific functions can be executed.

STRUCTURE MEMBERS

```
dev_info_t          *tran_hba_dip;          /* HBAs dev_info pointer */
void                *tran_hba_private;      /* HBA softstate */
void                *tran_tgt_private;      /* HBA target private pointer */
struct scsi_device  *tran_sd;               /* scsi_device */
int                 (*tran_tgt_init)( );    /* transport target */
                                            /* initialization */
int                 (*tran_tgt_probe)( );   /* transport target probe */
void                (*tran_tgt_free)( );    /* transport target free */
int                 (*tran_start)( );       /* transport start */
int                 (*tran_reset)( );       /* transport reset */
int                 (*tran_abort)( );       /* transport abort */
int                 (*tran_getcap)( );      /* capability retrieval */
int                 (*tran_setcap)( );      /* capability establishment */
struct scsi_pkt     *(*tran_init_pkt)( );   /* packet and dma allocation */
void                (*tran_destroy_pkt)( ); /* packet and dma */
                                            /* deallocation */
void                (*tran_dmafree)( );     /* dma deallocation */
void                (*tran_sync_pkt)( );    /* sync DMA */
void                (*tran_reset_notify)( );/* bus reset notification */
```

tran_hba_dip — **dev_info** pointer to the HBA supplying the **scsi_hba_tran** structure.

tran_hba_private — Private pointer which the HBA driver can use to refer to the device's soft state structure.

tran_tgt_private — Private pointer which the HBA can use to refer to per-target specific data. This field may only be used when the **SCSI_HBA_TRAN_CLONE** flag is specified in **scsi_hba_attach**(9F). In this case, the HBA driver must initialize this field in its **tran_tgt_init**(9E) entry point.

tran_sd — pointer to **scsi_device**(9S) structure if cloning; otherwise **NULL**.

tran_tgt_init — is the function entry allowing per-target HBA initialization, if necessary.

tran_tgt_probe — is the function entry allowing per-target **scsi_probe**(9F) customization, if necessary.

tran_tgt_free — is the function entry allowing per-target HBA deallocation, if necessary.

tran_start is the function entry that starts a SCSI command execution on the HBA hardware.

tran_reset is the function entry that resets a SCSI bus or target device.

tran_abort is the function entry that aborts one SCSI command, or all pending SCSI commands.

tran_getcap is the function entry that retrieves a SCSI capability.

tran_setcap is the function entry that sets a SCSI capability.

tran_init_pkt is the function entry that allocates a **scsi_pkt** structure.

tran_destroy_pkt is the function entry that frees a **scsi_pkt** structure allocated by **tran_init_pkt**.

tran_dmafree is the function entry that frees DMA resources which were previously allocated by **tran_init_pkt**.

tran_sync_pkt synchronize data in *pkt* after a data transfer has been completed.

tran_reset_notify is the function entry allowing a target to register a bus reset notification request with the HBA driver.

SEE ALSO

tran_abort(9E), **tran_destroy_pkt**(9E), **tran_dmafree**(9E), **tran_getcap**(9E), **tran_init_pkt**(9E), **tran_reset**(9E), **tran_reset_notify**(9E), **tran_setcap**(9E), **tran_start**(9E), **tran_tgt_free**(9E), **tran_tgt_init**(9E), **tran_tgt_probe**(9E), **ddi_dma_sync**(9F), **scsi_hba_attach**(9F), **scsi_hba_pkt_alloc**(9F), **scsi_hba_pkt_free**(9F), **scsi_device**(9S)

Writing Device Drivers