

CSS Service	CSS SuperClass	Release	Required by##	Devel. Interface	Implementation*	Standards	CSMS RE	FOS POC	Comment
IDL	Object Invocation	IR-1	all	OODCE Devl'm't Envir	OODCE	OSF/PST 1.x	Naveen Hota	tbs	OODCE expected in OSF PST process before Rel 1.2 (from HP today)
C++ Class Libraries	Object Invocation	IR-1	all	OODCE Devl'm't Envir	OODCE	OSF/PST 1.x	Naveen Hota	Shawn Firth	OODCE expected in OSF PST process before Rel 1.2 (from HP today)
Threads	Object Invocation	IR-1	all	underlying service	DCE;	OSF	Naveen Hota	Jon Kuntz	
RPC	Object Services	IR-1	OODCE IDL	underlying service	DCE;	OSF	Naveen Hota	Jon Kuntz	
Sockets	Common Facilities	IR-1	FOS/SDPS**	direct to sockets	UNIX OS	Unix OS	Nitin Vazarkar	Daid Hyde	for intra-DAAC use only/security not provided may not be supported for life of program
Mixed RPC/Sockets		Rel A???	SDPS		DCE/Unix OS	OSF/	Naveen Hota	David Hyde	may need for COTS w/o DCE support
Message Passing: Synchronous	Object Services	IR-1	ALL	OODCE IDL	DCE,RPC	OSF; TCP/IP	Naveen Hota	Ken Fregeolle	can be threaded
Asynchronous	Object Services	Rel A	FOS/SDPS	OODCE IDL	DCE	OSF; UDP/IP	Naveen Hota	Ken Fregeolle	IDL w/ RPC maybe option (can be threaded);FOS needs 6/95(proto in progress)?
Deferred Sync	Object Services	Rel A	FOS/SDPS	CSS API	DCE RPC + Custom	OSF; TCP/IP	Naveen Hota	tbs	API Async threaded RPC w/ guaranteed delivery;FOS needs 6/95(proto in progress)?
Transaction	Object Services	Rel B	SDPS	CSS APIs	DCE RPC +COTS	Vendor Transarc	Naveen Hota	tbs	TRPC/ FOS?
Multicast	Object Services	Rel B	FOS/ SDPS	TBD	TBD (DCE/COTS/Custom)	TBD	Naveen Hota	Jeff Cox	Trade in progress;FOS needs 6/95
Object Passing	Object Services	Rel A	FOS/SDPS				Naveen Hota		FOS needs 6/95
Security:									
Authentication	Object Services	IR-1	all	CSS APIs	DCE	OSF/Kerberos	Naveen Hota	Jim Creegan	
Authorization	Object Services	Rel A	all	CSS APIs	DCE	OSF/Kerberos	Naveen Hota	Jim Creegan	
Data Integrity	Object Services	Rel A	all	option in i/f API	DCE,RPCs	OSF/Kerberos	Naveen Hota	Jim Creegan	
Encryption	Object Services	Rel A	all	option in i/f API	DCE,RPCs	OSF/Kerberos	Naveen Hota	Jim Creegan	
User Registration	Common Facilities	Rel A	all	GUI Tools	Custom	Custom	Nitin Vazarkar	Jim Creegan	Tools for user admin; possible overlap in service with MSS
Kerberos	Common Facilities	Rel A	All	direct to kinit	Kerberos (PD) + Custom	Kerberos -MIT	Nitin Vazarkar	Jim Creegan	part of toolkit s/w for users on w/s outside of DCE cells
kftp, ktelnet	Common Facilities	Rel A	all	direct to kftp/ktelnet	Kerberos (PD) + Custom	Kerberos/ftp/telnet	Nitin Vazarkar	Jim Creegan	
Event Service	Object Services	Rel A	FOS,SDPS		OSF	DME	Tom Herron	Dave Peters	Possible overlap in service with MSS
History Logging			FOS,SDPS,MSS	CSS API	Custom	Custom/DCE rfc	Tom Herron	Dave Peters	API to log events
Initiation of Service	Object Invocation	Rel A	All		OODCE	mod. DCE	Tom Herron		
Factory	Object Invocation	Rel A	All	OODCE IDL	OODCE		Tom Herron	tbs	
Start-up/Recovery	Object Service	Rel A	All	CSS APIs + Custom	OODCE		Tom Herron	Jim Creegan	allows start/stop recovery of applications/client/server
File Transfer	Common Facilities	IR-1	SDPS,FOS	CSS API	ftp, rpc pipes	ftp, OSF DCE	Nitin Vazarkar	Jim Creegan	
Distributed File Service	Object Services	Rel B	SDPS	CSS API	DFS, AFS, or MR AFS	OSF DFS/AFS	Nitin Vazarkar	Jeff Glenn	FOS may need NFS
email Services	Common Facilities	IR-1	all	direct to service	Public Domain	SMTP	Nitin Vazarkar	Jim Creegan	
email Services w/MIME	Common Facilities	Rel B	SDPS	direct to service	Public Domain + COTS?	SMTP, MIME	Nitin Vazarkar	Jim Creegan	FOS ?
Directory (Naming) Service	Object Invocation	IR-1	All	CSS APIs	DCE	OSF DCE	Naveen Hota	Guy Swope	API for export,import,modify,GDS
Directory (Naming) Service	Object Invocation	Rel A	All	CSS APIs	DCE		Naveen Hota	Guy Swope	XDS;FOS needs 6/95
Time Service	Object Invocation	IR-1	All	underlying service#	DCE UTS	OSF DCE; UTS	Tom Herron	Scott Carter	
Trader:	Object Services	Rel B	SDPS	CSS APIs	OODCE/Custom	Modified OMG	Tom Herron		FOS?
Load Balancing	Object Services	Rel B	SDPS	option in API	OODCE/Custom	Modified OMG	Tom Herron	tbs	FOS?
QOS	Object Services	Rel B	SDPS	option in API	OODCE/Custom	Modified OMG	Tom Herron	tbs	FOS?
Virtual Terminal	Common Facilities	Rel A	SDPS, users	direct to service	Public Domain	VT100/ASCII Term.	Nitin Vazarkar	Jim Creegan	
Bulletin Board	Common Facilities	Rel A	SDPS, users	direct to service	COTS	USNET	Nitin Vazarkar	Jim Creegan	software toolkit distribution, help,service announcements

Notes:
 * COTS here means vendor s/w other than DCE/OODCE COTS or Unix OS; (PD)=public domain;
 ** Covers Heritage Code and some unwrapped COTS packages
 # No direct user interface planned
 ## Segment Users = SDPS; FOS; MSS(CSMS);users(ECS Users);all=SDPS,FOS&MSS
 CSS RE= CSS Responsible Engineer
 FOS POC = FOS Point of Contact Engineer
 SDPS POCs will be provided

General Comments/Purpose:

The purpose of this matrix is to provide a snapshot of proposed services CSMS Communications Subsystem(CSS)will provide to SDPS, FOS, Management Subsystem of CSMS and ECS Users by release. This matrix has been discussed with FOS, SDPS and MSS developers and general agreement has been reached as to the requirements for CSS to provide these services (by release), except as noted in the Comment field. This matrix represents work in progress and will be updated as required as CSS approaches PDR.