付録A 仕 様

型 名 出荷時のモデル形態		Express5800/FW500b			
		N8100-957			
		ディスクアレイモデル			
CPU	タイプ	Intel® Xeon™ Processor			
	クロック/キャッシュ	2.4GHz(フロントサイドバス: 533MHz)/512KB			
	標準	1個			
	最大	2個			
チップセット		E7501(533MHz)			
メモリ	標準	256MB			
	最大	1GB(標準のDIMMも交換必要)			
	増設単位	2枚単位(256MB×2/512MB×2/128MB×2)			
	メモリモシ゛ュール	DDR266 SDRAM DIMM、Chipkill対応(Lowprofile)			
	Check方式	ECC			
補助入力装置	フロッピーディスク(標準)	3.5インチドライブ×1			
	ハードディスク(標準)	72.6GB(36.3GB×2)			
	ハードディスク(最大)	72.6GB(36.3GB×2)			
	CD-ROM(標準)	ATAPIドライブ×1(トレーロード24倍速以上)			
ハードディスク	ベイ	2スロット			
拡張スロット*1	64-bit PCI-X	3xロット			
	(100MHz)*2				
	64-bit PCI-X	3スロット(Low-profile)			
	(100MHz)	標準装備のディスクアレイコントローラで1スロット使用済み			
LAN		1000Base-T/100Base-TX/10Base-T(2ポート)			
外部インタフェース	シリアル	2ポート(D-sub9-pin(1ポート)、RJ-45(1ポート))			
	ネットワーク	RJ-45(2ポート)			
	SCSI	Ultra320 SCSI(1ポート)			
筺体デザイン		ラックマウント(2U)			
外形寸法		483mm(幅)×88mm(高さ)×613mm(奥行き)*3			
質量		最大25kg			
電源		AC100V±10%、50/60Hz			
消費電力(最大	.)	400VA、390W			
環境条件		温度:10~35℃、湿度:20~80%(ただし、結露しないこと)			

^{*1} サポートしているボードや搭載スロットについては本文を参照してください。

^{*2 2}枚以上のPCIポードを搭載すると66MHzで動作します。

^{*3} フロントペゼル取り付け時は660mm。

付録B FireWall-1/VPN-1の予約語一覧

accept Duplicate January Nov sienna november Acount dynamic iul SnmpTrap Alert expcall Jul November skipme Auth expires oct spikpeer iuly **AuthAlert** Oct export July spoof and feb iun october spoofalert Feb call Jun October sr all february iune or src June ΑII February static orange anv firebrick khuf origdrop sun Any foreground keep origdst Sun sunday forenst limit apr oriaport Apr local Sunday green origsrc format localhost other switchs april April fri log outbound sync aug Fri logics packet targets Aug friday packetid thu Long Friday packetlen Thu august magenta August from mar pass thursday black fwline Thursday Mar r_arg blackboxs fwrule march r cdir to blue March tod gateways r_cflags broadcasts Mail tracks get r_connarg call gold mav tue r_ctype gray 101 May Tue cvan r_entry date green mdav r pflags tuesday dark hashsize medium record Tuesday green gold slate red ufp refresh UserDefined dark host blue orchid hosts modify reiect vanish day if mon resourceobi wasskipped debug wed is Mon routers dec ifaddr monday sat Wed ifid Sat Dec Monday wednesday decmber implies saturday Wednesday month December in mortrap Saturday xlatedport deffunc inbound navy sep xlatedst define interface blue Sep xlatemethod delete interfaces netobi september xlatesport direction ipsecmethods netof September xlatesrc do ipsecdata nets serveobi xor domains ian nexpires servers vear drop Jan set yellow not dst Short january nov

文字の並び

- ・曜日、月の名前(Sunday、sunday、sun)
- · [S | s] +[r | R] + n(10進の数字)(例: Sr10,sR2など)、

その他

- ・日本語などの2byte文字
- ・最初から登録されているObject名(Telnet,FTPなど)や記号(!,",#,\$,%,&,'など)
- ・Object名を作成する際の使用する文字といたしましては、英数字と"_"(アンダースコア)のみを推奨。Object名はアルファベットで始めなければなりません。

付

録

付録C 二重化機能のログメッセージ

二重化機能では動作の履歴や以上の検出をシステムログ(syslog)に出力します。出力するメッセージとその説明、対処方法は以下のようになります。

イベントID	イベント分類	メッセージ	説明	対処	
IDM001	情報	Starting	クラスタシステムの起動中です。	-	
IDM001	情報	Shutting down	クラスタシステムの終了中です。	_	
IDM003	情報	stopping all process	内部プロセスが異常終了したため、 全プロセスを停止します。	システムを再起動してください。	
IDM004	情報	Halting system	内部プロセスが異常終了したため、 システムを停止します。		
IDM005	情報	Rebooting system	内部プロセスが異常終了したため、 システムを再起動します。	_	
IDM006	情報	Restarting main process	main プロセスが異常終了したため、main プロセスを再起動します。	_	
IDM007	情報	Restarting send process	sendプロセスが異常終了したた め、sendプロセスを再起動します。	_	
800MQI	情報	Restarting recv process	recvプロセスが異常終了したた め、recvプロセスを再起動します。	_	
IDM009	情報	Auto startup is disabled.	自動起動に設定されていません。	基本設定ツール(fwsetup)で自動起 動するように設定してください。	
EDM001	異常	Main process abnormal exit	内部異常を検出したため、mainプロ セスが異常終了しました。	引き続きRestarting main processが出 力されれば自動リカバリに成功してい ます。	
EDM002	異常	Send process abnormal exit	内部異常を検出したため、HB送信プロセスが異常終了しました。	引き続きRestarting send processが 出力されれば自動リカバリに成功して います。	
EDM003	異常	Recv process abnormal exit	内部異常を検出したため、HB受信プロセスが異常終了しました。	引き続きRestarting recv processが出 力されれば自動リカバリに成功してい ます。	
EDM007	異常	Configuration file is invailed.	設定がされていないか、設定の情報 が不正です。	基本設定ツール(fwsetup)で設定内容を確認してください。	
EDM008	異常	Critical error occured	致命的な異常が発生しました。	システムを再起動してください。	
IGM001	情報	%1 start.	業務%1が起動しました。Firewall機能が起動された側のサーバで出力されます。	-	
IGM002	情報	%1 stop.	業務%1が停止しました。Firewall機能が停止された側のサーバで出力されます。	_	
IGM003	情報	%1 failover start.	業務%1のフェイルオーバー処理を開始します。	-	
IGM004	情報	%1 failback start.	業務%1のフェイルバック処理を開始 します。	-	
EGM001	異常	%1 start failed.	業務%1が起動に失敗しました。	リソースに異常がなければ、システム を再起動してください。	
EGM002	異常	%1 stop failed.	業務%1が停止に失敗しました。	リソースに異常がなければ、システム を再起動してください。	

イベントID	イベント分類	メッセージ	説明	対処
EGM003	異常	%1(%2) error. stop %2.	リソース%1に異常が発生しました。 再起動できなかったため、業務%2を 停止します。	%1が、 - FIPの場合、[ERFxxx]の項を参照してください。 - EXECの場合、[ERExxx]の項を参照してください。 - IPWの場合、[ERIxxx]の項を参照してください。 - PARPの場合、[ERPxxx]の項を参照してください。
EGM004	異常	%1(%2) error. failover %2.	リソース%1に異常が発生しました。 業務%2をフェイルオーバします。	%1が、 - FIPの場合、[ERFxxx]の項を参照してください。 - EXECの場合、[ERExxx]の項を参照してください。 - IPWの場合、[ERIxxx]の項を参照してください。 - PARPの場合、[ERPxxx]の項を参照してください。
IMN001	情報	all node wake up.	起動待ち合わせ時間内に、全サーバ が起動しました。	_
IMN002	情報	wait timeout.	起動待ち合わせがタイムアウトしま した。	待機系サーバでFirewall機能が動作して いる可能性があります。運用系サーバ が起動してきたら、必要に応じ てFirewall機能を運用系サーバに移動し てください。
IMN003	警告	%1 down.	サーバ%1がダウンしました。	サーバ%1の障害を取り除いてください。引き続きIGM001のイベントが登録されていれば、フェイルオーバが成功しています。
IMN004	情報	%1 up.	サーバ%1が起動しました。	_
IMN010	情報	ignore stop message from %1.	サーバ%1からの停止メッセージを無 視しました。	_
EMN001	異常	boot fail. stop.	内部異常のためmainプロセスの起動 に失敗しました。	システムを再起動してください。
IRF001	情報	%1(%2):%3/%4 turned available.	業務%1のFIPリソース%2(IPアドレス%3/ネットマスク%4)の活性に成功しました。(異常状態からの復帰時のみ出力)	_
ERF001	異常	%1(%2):%3/%4 can1 t enable.	業務%1のFIPリソース%2(IPアドレス%3/ネットマスク%4)の活性に失敗しました。	既に使用されているPアドレスとFIPが 重複している可能性があります。確認 してください。
IRE001	情報	%1(%2):%3 turned executable.	業務%1のEXECリソース%2(実行パス%3)の実行に成功しました。(異常状態からの復帰時のみ出力)	_
ERE001	異常	%1(%2):%3 can1 t execute.	業務%1のEXECリソース%2(実行パス%3)の実行に失敗しました。	/opt/necfws/bin/ckcstat /opt/necfws/bin/ckfwalive のパスが存在していることを確認して ください。
ERE002	異常	%1(%2):%3 is disappear.	業務%1のEXECリソース%2(実行パス%3)の監視で異常が発生しました。	Firewall 機能に異常が発生した可能性 があります。VPN-1/FireWall-1 の管 理GUIで状況を確認してください。
IRI001	情報	%1(%2):%3 turned reachable.	業務%1のIPWリソース%2(監視アドレス%3)との通信が復帰しました。	_
ERI001	異常	%1(%2):%3 can1 t reach.	業務%1のIPWリソース%2(監視アドレス%3)の監視で異常が発生しました。	監視対象のネットワークを確認してく ださい。
IRP001	情報	%1(%2):%3 turned available.	業務%1のPARPリソース%2(IPアドレス%3)の活性に成功しました。(異常状態からの復帰時のみ出力)	-
ERP001	異常	%1(%2):%3 can1 t enable.	業務%1のFIPリソース%2(IPアドレス%3の活性に失敗しました。	既に使用されているIPアドレス とPARPアドレスが重複している可能 性があります。確認してください。

付録D 保守サービス会社網一覧

NEC Express5800シリーズ、および関連製品のアフターサービスは、お買い上げのNEC販売店、最寄りのNEC、またはNECフィールディング株式会社までお問い合わせください。下記にNECフィールディングのサービス拠点所在地一覧を示します。

(受付時間: AM9:00~PM5:00 土曜日、日曜日、祝祭日を除く)

次のホームページにも最新の情報が記載されています。

http://www.fielding.co.jp/

このほか、NEC販売店のサービス網がございます。お買い上げの販売店にお問い合わせください。

2003年2月現在

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北海道	札幌支店	011-221-3705	060-0042	札幌市中央区大通西4-1 新大通ビル9F
	新札幌支店	011-894-1131	004-0041	札幌市厚別区大谷地東4-2-20 第二西村ビル1F
	釧路営業所	0154-43-2361	085-0847	釧路市大町1-1-1 道東経済センタービル7F
	旭川支店	0166-24-2098	070-0033	旭川市三条通9丁目左1号 明治生命旭川ビル1F
	オホーツク営業所	0157-25-7520	090-0024	北見市北四条東3-1-1 富士火災北見ビル3F
	苫小牧営業所	0144-36-3846	053-0022	苫小牧市王子町3-2-23 朝日生命苫小牧ビル2F
	室蘭営業所	0143-46-3180	050-0083	室蘭市東町2-24-4 石井第5ビル3F
	函館支店	0138-54-5642	040-0001	函館市五稜郭町1-14 住友生命五稜郭ビル3F
	道東営業所	0155-25-4892	080-0013	帯広市西三条南10-32 日本生命帯広駅前ビル5F
	小樽営業所	0134-24-5685	047-0036	小樽市長橋3-4-14
青森	青森支店	017-739-8501	030-0113	青森市第二問屋町4-1-20 NECソフトウェア青森本社ビル1F
	八戸営業所	0178-44-4354	031-0081	八戸市柏崎1-10-2 八戸第一生命ビル1F
	弘前営業所	0172-34-9083	036-8001	弘前市代官町38 安田生命弘前ビル1・2F
岩手	盛岡支店	019-635-3011	020-0866	盛岡市本宮3-13-20
	一関営業所	0191-21-5506	021-0031	一関市青葉1-6-4 シャトレー壱號館1F
宮城	仙台支店	022-262-3445	980-0811	仙台市青葉区一番町4-7-17 小田急不動産仙台ビル6F
秋田	秋田支店	018-863-7938	010-0951	秋田市山王1-3-29
山形	山形支店	023-631-3502	990-2445	山形市南栄町3-6-34
	鶴岡営業所	0235-25-8386	997-0031	鶴岡市大宝寺町1-30
	米沢営業所	0238-24-1418	992-0027	米沢市駅前3-5-22 かなつビル1F
福島	郡山支店	024-938-5209	963-8022	郡山市西ノ内1-22-13
	福島支店	024-536-3703	960-8074	福島市西中央5-6-1
	いわき営業所	0246-29-5301	970-8034	いわき市平上荒川字桜町34-1
	会津若松営業所	0242-29-3699	965-0818	会津若松市東千石2-1-45
茨城	鹿島支店	0299-82-4860	314-0014	鹿嶋市光3 住友金属構内
	つくば支店	0298-37-1620	305-0853	つくば市榎戸783-12 沼尻産業ビル1F
	水戸支店	029-257-1860	310-0911	水戸市見和3-575-3
栃木	宇都宮支店	028-632-8140	321-0954	宇都宮市元今泉2-7-6
	小山営業所	0285-21-1495	323-0807	小山市城東1-14-12 ウエルストン1ビル1F
群馬	群馬支店	027-243-6316	371-0026	前橋市大手町2-6-20 安田生命前橋ビル5F
	高崎営業所	027-365-3500	370-0073	高崎市緑町1-22-5
	太田支店	0276-45-0666	373-0853	太田市浜町58-24
埼玉	大宮支店	048-660-1881	330-0038	さいたま市宮原町2-85-5
	熊谷営業所	048-527-0597	360-0036	熊谷市桜木町1-1-1 秩父鉄道熊谷ビル4F
	浦和支店	048-866-5471	336-0022	さいたま市白幡4-12-19
	川口営業所	048-225-6722	332-0001	川口市朝日6-2-3 あいおい損保・川口東ビル4F
	川越支店	042-955-7695	350-1331	狭山市新狭山2-11-10
	越谷営業所	048-978-9500	343-0042	越谷市千間台東1-7-25 エムケービル1F

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	千葉東支店	043-221-6964	260-0843	千葉市中央区末広1-12-15
	成田営業所	0476-22-5390	286-0044	成田市不動ヶ岡2152-2 成田旭ビル1F
	君津営業所	0439-55-7278	299-1144	君津市東坂田1-3-2 京葉君津ビル3F
	船橋支店	047-434-1611	273-0012	船橋市浜町2-1-1 ららぽーと三井ビル1F
	柏営業所	0471-35-2400	277-0827	柏市松葉町2-5-1
	印西営業所	0476-46-4250	277-0827	印西市大塚1-9千葉ニュータウンエネルギーセンター1F
東京	東京中央支店	03-3456-5213	108-0073	港区三田1-4-28 三田国際ビル1F
	大森支店	03-3764-0007	140-0013	品川区南大井6-25-3 ビリーヴ大森ビル8F
	五反田支店	03-3443-7905	141-0022	品川区東五反田5-25-16 朝日生命五反田ビル1F
	新橋支店	03-3431-9868	105-0021	港区東新橋2-12-7 住友東新橋ビル2号館3F
	赤坂支店	03-5413-1701	107-0052	港区赤坂4-9-6 タク赤坂ビル2F
	三田支店	03-3452-6168	108-0073	港区三田1-4-28 三田国際ビル1F
	渋谷支店	03-5458-3341	150-0036	渋谷区南平台町2-17 日交渋谷南平台ビル8F
	新宿支店	03-3352-8071	160-0022	新宿区新宿4-2-18 新宿光風ビル3F
	池袋支店	03-3985-3194	170-0013	豊島区東池袋1-32-7 三井生命池袋ビル4F
	日本橋支店	03-3297-0783	104-0033	中央区八丁堀4-5-8 ノワール八丁堀2F
	江東支店	03-3649-3230	135-0016	江東区東陽3-27-32 玉河ビル5F
	秋葉原支店	03-5821-2474	111-0052	台東区柳橋2-19-6 秀和柳橋ビル8F
	足立営業所	03-3888-7151	120-0034	足立区千住1-11-2 カーニープレイス千住7F
	神田支店	03-3233-2411	101-0064	千代田区猿楽町2-7-8 住友水道橋ビル8F
	府中支店	042-362-6833	183-0036	府中市日新町1-4-5 第六MKビル1F
	立川支店	042-527-2527	190-0022	立川市錦町2-4-6 住友生命立川ビル3F
	小金井支店	042-385-7666	184-0013	小金井市前原町5-9-7
神奈川	神奈川支店	045-314-7625	220-0004	横浜市西区北幸2-8-4 横浜西口KNビル1F
	横須賀営業所	0468-27-3188	238-0004	横須賀市小川町14-1 ニッセイ横須賀センタービル1F
	川崎営業所	044-244-1083	210-0023	川崎市川崎区小川町11-10 第10平沼ビル5F
	相模原支店	042-746-6111	228-0803	相模原市相模大野7-1-6 相模大野第一生命ビル4F
	厚木支店	046-225-0411	243-0032	厚木市恩名900-4
	平塚支店	0463-21-4777	254-0035	平塚市宮の前1-2 あいおい損保平塚第一ビル2F
	藤沢営業所	0466-22-0204	251-0055	藤沢市南藤沢17-10 コア湘南田村ビル1F
	小田原営業所	0465-35-6647	250-0042	小田原市荻窪362 第二オギクボビル1F
	玉川支店	044-814-1551	213-0002	川崎市高津区二子5-1-1 高津パークプラザビル4F
新潟	新潟支店	025-243-2315	950-0983	新潟市神道寺275-3
	長岡営業所	0258-35-5217	940-0034	長岡市福住2-3-6 小林石油ビル
	柏崎営業所	0257-22-2362	945-0833	柏崎市若葉町2-22 柏崎情報開発センター2F
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	黒部営業所	0765-54-0447	938-0031	黒部市三日市字新光寺1880-1
	高岡営業所	0766-25-4212	933-0912	高岡市丸の内1-40 高岡商工ビル8F
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	小松営業所	0761-24-3782	923-0926	小松市竜助町36 小松東京海上ビル3F
	七尾営業所	0767-54-0298	926-0012	七尾市相生町45
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	岡谷営業所	0266-24-4870	394-0028	岡谷市本町4-5-18 TERRITATION (本 1) (元 1) (1) (1) (1) (1) (1) (1
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	名南支店	052-694-1031	457-0862	名古屋市南区内田橋1-8-5 アートライフ・タケセイ1F
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	浜田営業所	0855-22-6092	697-0033	浜田市朝日町70-5 朝日第2ビル1F
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広島	広島支店	082-248-4222	730-0042	広島市中区国泰寺町2-5-11 西橋屋ビル4F
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	東広島営業所	0824-22-6411	739-0003	東広島市西条町大字土与丸441-1
	三次営業所	0824-63-3186	728-0013	三次市十日市東6-13-14
	福山支店	0849-31-8907	720-0973	福山市南蔵王町3-13-12
	備後府中営業所	0847-46-4835	726-0003	府中市元町475-1 カルチャープラザ4F
	尾道営業所	0848-22-3736	722-0037	尾道市西御所町14-15 第六堀田ビル4F
ШΟ	山口支店	083-973-1858	754-0011	吉敷郡小郡町御幸町4-9 山陽ビル小郡1F
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	宇部営業所	0836-33-5120	755-0043	宇部市相生町8-1 宇部興産ビル10F
	下関営業所	0832-53-3230	751-0853	下関市川中豊町2-6-36
	萩営業所	0838-22-7472	758-0022	萩市浜崎町121-1 Kビル2F
徳島	徳島支店	088-622-1270	770-0852	徳島市徳島町2-19-1 あいおい損保徳島ビル4F
香川	高松支店	087-833-1771	760-0008	高松市中野町29-2 NEC四国ビル7F
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	宇和島営業所	0895-25-1000	798-0032	宇和島市恵美須町2-4-14 井上ビル
	今治営業所	0898-31-5741	794-0043	今治市南宝来町1-7-7 住友海上今治ビル2F
	新居浜支店	0897-34-4774	792-0003	新居浜市新田町3-2 住友商事新居浜ビル5F
	伊予三島営業所	0896-24-3855	799-0404	伊予三島市宮川3-5-25 ホワイトヴィラ1F
高知	高知支店	088-883-8884	780-0872	高知市杉井流70-5 マノワール杉井流
福岡	福岡支店	092-472-2853	812-0004	福岡市博多区榎田2-3-27 STS第二ビル3F
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	北九州支店	093-522-0581	802-0014	北九州市小倉北区砂津1-5-34 小倉興産23号館4F
	飯塚営業所	0948-24-0919	820-0005	飯塚市新飯塚13-11 北代ビル2F
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That's all there is to it!

■ 謝辞

Linus Torvalds氏をはじめとするLinuxに関わるすべての皆様に心より感謝いたします。

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