ftScalable ストレージアレイ G2 ログ取得手順

内容：　ftScalable ストレージアレイ G2 に関する障害調査を行う際に、必要となるログ･データの取得方法になります。

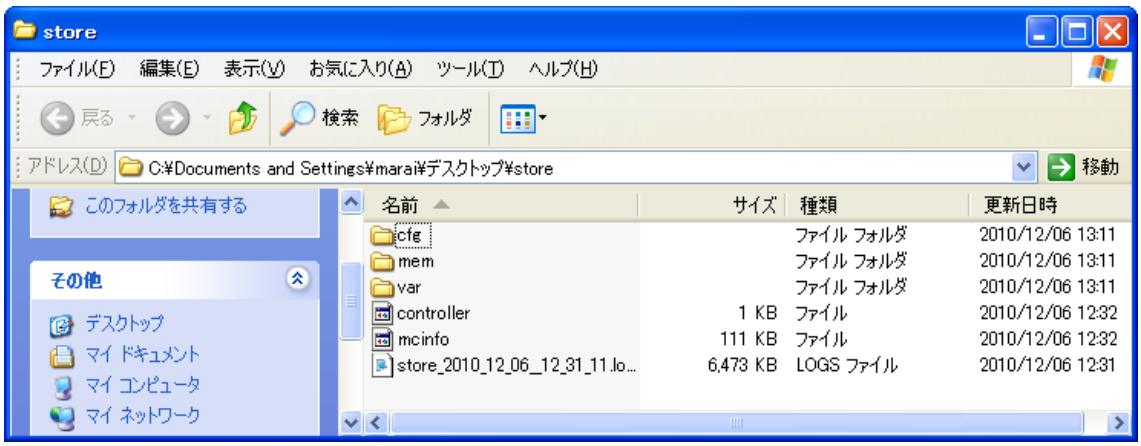
Rev 0.1 2011/04/27

ftScalable ストレージアレイ G2 ログ取得内容

ftScalable ストレージにはロギング機能が備わっており、ログには下記内容が含まれています。
ftScalable ストレージのログはデバッグログと呼ばれています。

デバッグログの中は下記の内容が含まれます。

- cfg ディレクトリ
- mem ディレクトリ
- var ディレクトリ
- controller ファイル
- mcinfo ファイル
- store_log ファイル



ftScalable ストレージの障害発生時は下記 2 つの方法の内何れからの手順でデバッグログを取得する必要があります。

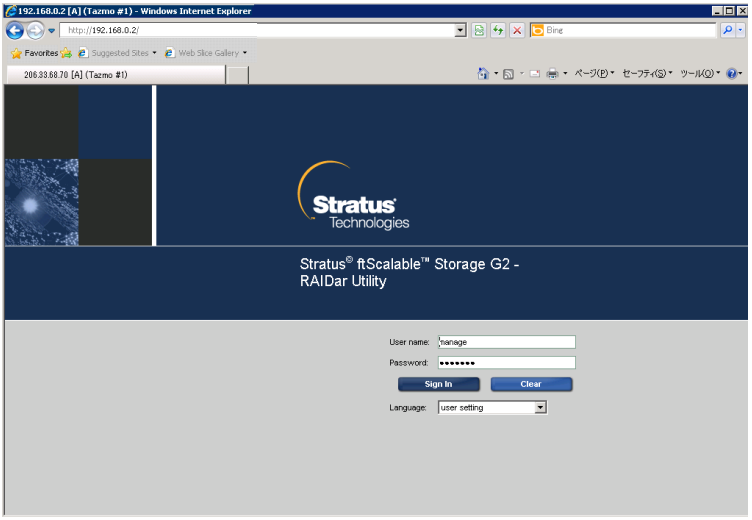
① RAIDar を使用したログの取得
② FTP を使用したログの取得

※本資料においては、ftScalable ストレージに設定されている IP アドレスは、192.168.0.2 を使用しています。

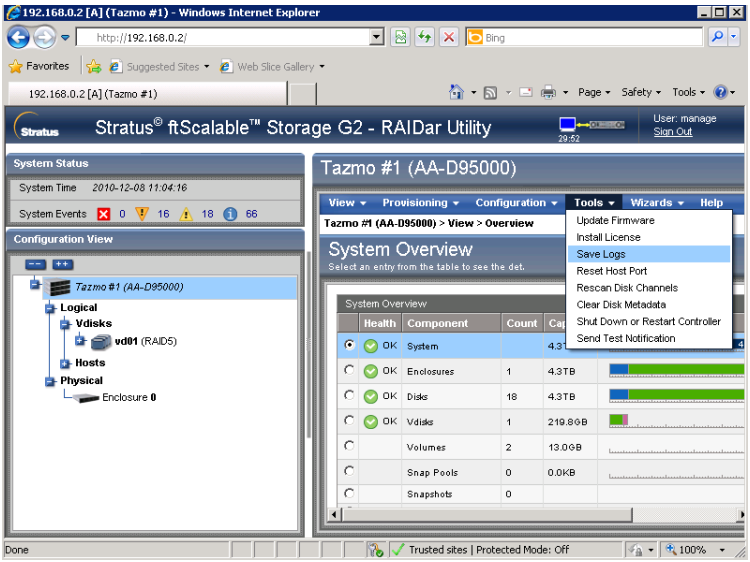
※本資料で使用する manage ユーザのパスワードについては、別途お知らせします。

デバッグログ取得方法

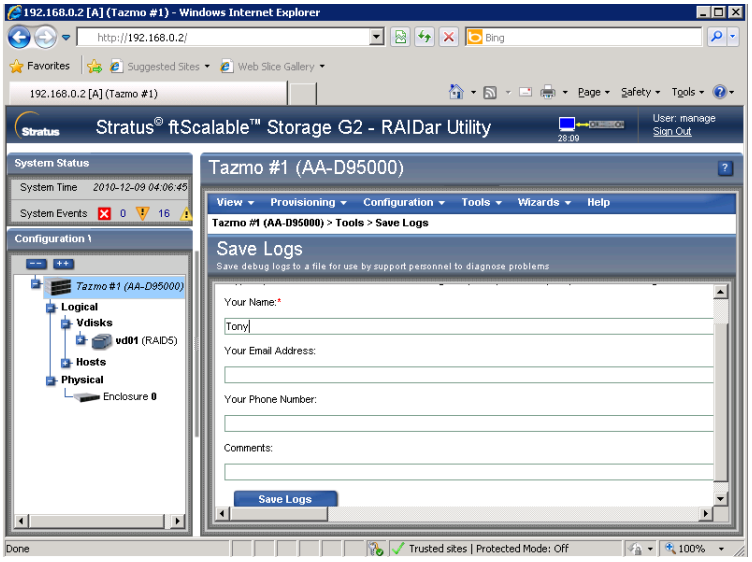
1. RAIDar からの取得



1. RAIDar にログインします。

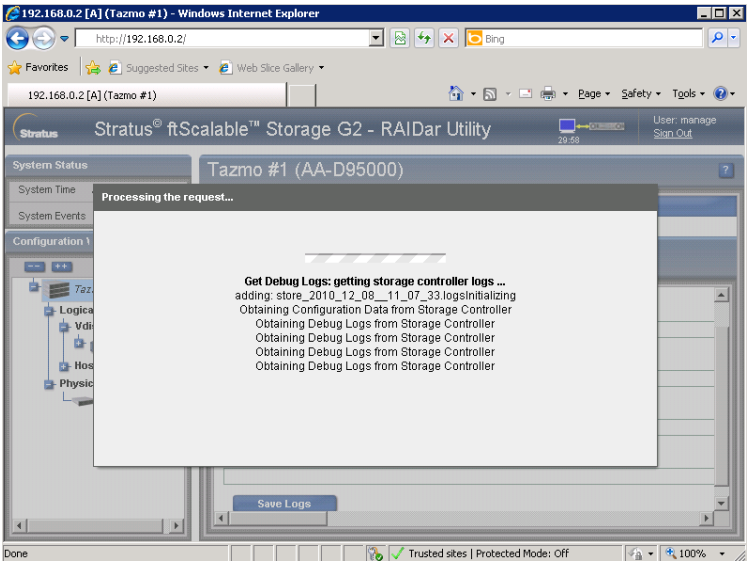


2. Tools から Save Logs を選択します。

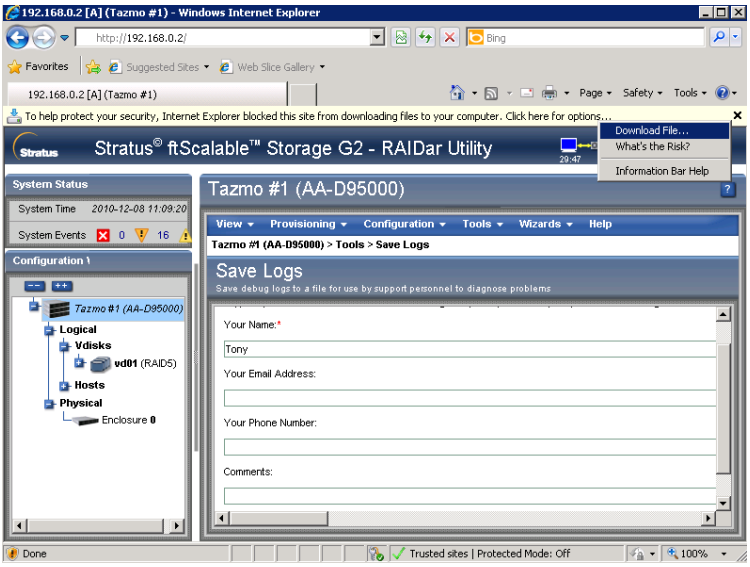


3. Your Name に任意の名前を入力し Save Logs をクリックします。

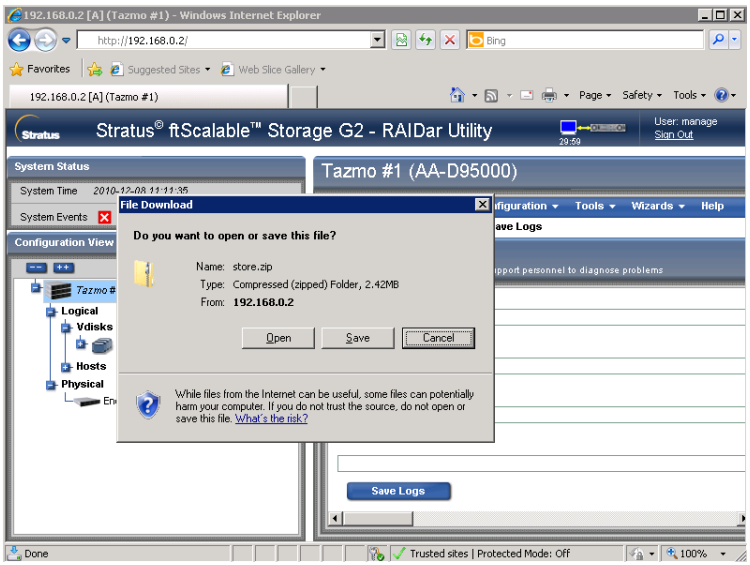
※ ftScalable Storage の時刻が Server とずれている場合があるので取得時間を Commnets に入力して下さい。



4. デバッグログの取得が開始されます。



5. 右図の様にブラウザでファイルのダウンロードがブロックされたら Download file をクリックし再度同じ手順を実施します。

	6. デバッグログが zip 形式で取得されるのでSaveで保存します。

2. ftp での取得方法

ftpを実施して”get logs *filename*.zip”コマンドで取得する事が可能です。ftp が接続できない場合は後述の ftp の有効化を参照して下さい。

例：

```
ftp 192.168.0.2
Connected to 192.168.0.2.
220-Welcome to Pure-FTPd.
220-You are user number 1 of 5 allowed.
220-Local time is now 14:18. Server port: 21.
220-This is a private system - No anonymous login
220 You will be disconnected after 15 minutes of inactivity.
User (192.168.0.2:(none)): manage
331 User manage OK. Password required
Password:******
230-OK. Current restricted directory is /
230-Instructions for updating firmware in controller modules:
230-     1. Type 'put <filename> flash' where <filename> is the new firmware image to load.
230-     2. It will take approximately 10 minutes for the new firmware to load and
230-          for the automatic restart to complete. Progress messages will be
230-          displayed in this FTP interface during that time. Wait for the progress
230-          messages to indicate that the code load has completed.
230-     3. If the partner firmware upgrade (PFU) feature is enabled, allow
230-          an additional 20 minutes for the partner controller to be updated.
230-          No messages will be displayed in the FTP interface during PFU.
230-          If PFU is NOT enabled, log into the other controller and repeat steps 1-2.
230-     4. WARNING! Do not power cycle or restart during the firmware update
230-          as this can result in loss of capabilities for this unit.
230-     5. If you attempt to load an incompatible firmware version (such as code

230-          that is intended only for an iSCSI system on an FC system) the message
230-          "*** Code Load Fail. Bad format image. ***" will be displayed and the FTP
230-          prompt will come back in just a few seconds. The code will not be loaded.
230-
230-Instructions for updating firmware in expansion modules:
230-     1. Obtain the address of each enclosure management processor (EMP) in the form
230-          <EMP-channel-ID>:<EMP-target-ID> (for example, 0:63 and 1:63)
230-          and obtain the firmware revision of each EMP.
230-          Determine which EMPs need to be updated based on the revision.
230-          Note: In the WBI, the EMP addresses are displayed by clicking on each
230-          enclosure in the Configuration View. The needed data is displayed
230-          in the fields labeled 'EMP A Bus ID', 'EMP B Bus ID', 'EMP A TargetID',
230-          'EMP B Target ID', 'EMP A Revision', and 'EMP B Revision'. (The terms
230-          'bus' and 'channel' are equivalent.)
230-          Note: In the CLI, enter 'show enclosures'. The needed data is displayed
230-          in the columns labeled 'EMP A CH:ID Rev' and 'EMP B CH:ID Rev'.
230-     2. Log in via FTP with user name and password.
230-     3. Type 'put <filename> encl:<EMP-channel-ID>:<EMP-target-ID>'
230-          where <filename> is the new firmware image to load.
230-     4. It typically takes several minutes for the new firmware to load. Progress
230-          messages will be displayed in this FTP interface during that time. Wait
230-          for the progress messages to indicate that the code load has completed.
```

```
230-            WARNING! Do not power cycle or restart during the firmware update
230-            as this can result in loss of capabilities for this unit.
230-      5. Repeat steps 3-4 for each EMP to update in each enclosure.
230-
230-Instructions for updating disk firmware:
230-      1. Obtain the address of each disk to be loaded in the form
230-            <enclosure-ID>:<slot-number> (for example, 0:1 and 1:9)
230-            and obtain the firmware revision of each of these disks.
230-            Determine which disks need to be updated based on the revision.
230-            Note: In the WBI, the disk addresses are displayed by clicking on each
230-            enclosure in the Configuration View and then selecting the desired
230-            disk. The needed data is displayed in the fields labeled 'EnclosureID',
230-            'Slot', and 'Revision'.
230-            Note: In the CLI, enter 'show disks'. The needed data is displayed
230-            in the columns labeled 'Location' and 'Revision'.
230-      2. Log in via FTP with user name and password.
230-      3. Type 'put <filename> disk:<enclosure-ID>:<slot-number>'
230-            where <filename> is the new firmware image to load.
230-      4. It typically takes several minutes for the new firmware to load. Progress
230-            messages will be displayed in this FTP interface during that time. Wait
230-            for the progress messages to indicate that the code load has completed.
230-            WARNING! Do not power cycle or restart during the firmware update
230-            as this can result in loss of capabilities for this unit.
230-      5. Repeat steps 3-4 for each disk to update in each enclosure.
230-
230-Instructions for getting debug logs:
230-      1. Log in with a user name and password.
230-      2. Type 'get logs <filename.zip>'
230-            where <filename.zip> is the file to capture the system debug logs.
230-            Note the debug logs are in a compressed archive format and will need to be
230-            uncompressed before viewing.
230-
230-Instructions for loading a license file:
230-      1. Log in with a user name and password.
230-      2. Type 'put <certificate.txt> license'
230-            where <certificate.txt> is the name of the license file generated
230-            for your specific system.
230
ftp> get logs store1223.zip
200 PORT command successful
119-Starting operation:
STATUS: getting storage controller logs ...
  adding: store_2011_01_27_14_18_57.logsInitializing
Obtaining Configuration Data from Storage Controller
Obtaining Configuration Data from Storage Controller
Obtaining Debug Logs from Storage Controller
Obtaining Debug Logs from Storage Controller
Obtaining Debug Logs from Storage Controller
Obtaining Debug Logs from Storage Controller
Obtaining Debug Logs from Storage Controller
Obtaining Debug Logs from Storage Controller
Obtaining Debug Logs from Storage Controller
Obtaining Debug Logs from Storage Controller
 (deflated 90%)
Obtaining Debug Logs from Storage Controller
Obtained Storage Controller Logs
```

```
Success: Command completed successfully.

Exiting.
done getting the storage controller logs
STATUS: getting the management controller logs ...
   adding: controller (stored 0%)
   adding: mcinfo (deflated 89%)
   adding: cfg/log/appsv_019580_000002.log (deflated 93%)
   adding: cfg/log/appsv_019580_000003.log (deflated 93%)
   ..............
   ......
   ..
   adding: cfg/log/active/web_019579_000000.log (deflated 90%)
   adding: cfg/pfu/pfu.log (deflated 88%)
   adding: cfg/cpld.log (deflated 63%)
   adding: var/log/app.out (deflated 60%)
   adding: var/log/boot.out (deflated 62%)
   adding: var/log/messages (deflated 91%)
   adding: var/log/snmpd.log (deflated 39%)
done getting the management controller logs
RETURN_CODE: 12
119 Operation Complete.
150-Connecting to port 1756
150 1779.9 kbytes to download
ftp: 1822638 bytes received in 0.23Seconds 7789.05Kbytes/sec.
ftp>
```

ftp の有効化

下記のように ftp でエラーとなり接続できない場合は、telnet を実施して ftp を有効化する必要があります。

```
C:¥Documents and Settings¥administrator>ftp 192.168.0.2
> ftp: connect :エラー番号が不明です
```

telnet を実施し”set protocols”コマンドで ftp を有効化します。

例：

```
telnet 192.168.0.2
192.168.0.2 login: manage
Password:*******

Stratus ftScalable Storage AA-D95000
System Name: Tazmo #1
System Location:Uninitialized Location
Version:L210R015

下記コマンドで現在の設定を確認
# show protocols
Service and Security Protocols
------------------------------
Web Browser Interface (HTTP): Enabled
Secure Web Browser Interface (HTTPS): Enabled
```

Command Line Interface (Telnet): Enabled
Secure Command Line Interface (SSH): Enabled
Storage Management Initiative Specification (SMI-S): Enabled
File Transfer Protocol (FTP): Disabled
Simple Network Management Protocol (SNMP): Enabled
Service Debug (Debug): Enabled
In-band SES Management (SES): Enabled

Success: Command completed successfully.

下記コマンドで ftp の有効化
set protocols ftp enabled
Success: Command completed successfully.

ftp が有効になったことを確認
show protocols
Service and Security Protocols

Web Browser Interface (HTTP): Enabled
Secure Web Browser Interface (HTTPS): Enabled
Command Line Interface (Telnet): Enabled
Secure Command Line Interface (SSH): Enabled
Storage Management Initiative Specification (SMI-S): Enabled
File Transfer Protocol (FTP): Enabled
Simple Network Management Protocol (SNMP): Enabled
Service Debug (Debug): Enabled
In-band SES Management (SES): Enabled

Success: Command completed successfully.

以上