# GBase8s自动初化脚本使用说明

**脚本名称：**AutoInit\_GBase8s.sh

**功能：**自动解压同一目录下的GBase 8s安装包，并执行数据库软件安装，数据库初始化，同时根据操作系统资源进行一定的数据库参数优化操作。最终生成可用的数据库环境。

**适用性：**适用于x86\_64架构下的REHL/CentOS 6或者以上操作系统环境，在基于Ubuntu的银河麒麟（4.0.2）上通过验证。其它系统环境未经实际验证，但应不影响使用。

**完成后的JDBC连接**

**DriverName：**

gbasedbt: com.gbasedbt.jdbc.Driver

informix: com.informix.jdbc.IfxDriver

**URL(直接指定服务器)：**jdbc:<USERNAME>-sqli://<IPADDR>:9088/<DBNAME>:<USERNAME\_UPPER>SERVER=gbase01;DB\_LOCALE=zh\_CN.utf8;CLIENT\_LOCALE=zh\_CN.utf8;IFX\_LOCK\_MODE\_WAIT=10;IFX\_ISOLATION\_LEVEL=5;

其中：<IPADDR>为实际IP地址，<DBNAME>为数据库名称，<USERNAME>为gbasedbt或者informix

**用户名称：**<USERNAME>

**用户密码：**GBase123

**使用说明：**

1，将脚本AutoInit\_GBase8s.sh与GBase 8s安装包放置同一目录下。

[root@a02~]# ll

total 309172

-rwxr-xr-x 1 root root 15388 12月 9 16:18 AutoInit\_GBase8s.sh

-rwxr-xr-x 1 root root 1259 12月 9 16:22 CleanAll.sh

-rw-r--r-- 1 root root 316221440 9月 4 09:12 GBase8sV8.7\_3.0.0\_1\_93e040\_RHEL6\_x86\_64.tar

2，执行安装

[root@a02 ~]# **bash AutoInit\_GBase8s.sh**

[2020-12-13 12:27:41] The SYSDBA user is: **gbasedbt**

[2020-12-13 12:27:41] ifconfig check passed.

[2020-12-13 12:27:41] unzip check passed.

[2020-12-13 12:27:41] tar check passed.

[2020-12-13 12:27:41] timeout check passed.

[2020-12-13 12:27:41] **IPADDR: 0.0.0.0**

[2020-12-13 12:27:41] **Datadir: /data/gbase**

[2020-12-13 12:27:41] Creating group [gbasedbt] and user [gbasedbt] with **HOME [/home/gbase]**.

[2020-12-13 12:27:41] Unziping [GBase8sV8.7\_3.0.0\_1\_93e040\_RHEL6\_x86\_64.tar].

[2020-12-13 12:27:47] Check path **INSTALL\_DIR(/opt/gbase)** security.

[2020-12-13 12:27:47] Execute software install, this will take a moment.

说明：不带参数将使用默认的DATADIR=/data/gbase，该目录用于存放数据库空间文件。或者实际不使用该目录，应加参数指定，如： AutoInit\_GBase8s.sh -d /gbasedata/dbs 指定使用的空间为/gbasedata/dbs。

注：指定的目录应有足够的空间，最小安装不小于20GB空间。

安装过程中将打印安装过程，日志如下：

[root@bd ~]# **bash AutoInit\_GBase8s.sh**

[2020-12-13 12:27:41] The SYSDBA user is: **gbasedbt**

[2020-12-13 12:27:41] ifconfig check passed.

[2020-12-13 12:27:41] unzip check passed.

[2020-12-13 12:27:41] tar check passed.

[2020-12-13 12:27:41] timeout check passed.

[2020-12-13 12:27:41] **IPADDR: 0.0.0.0**

[2020-12-13 12:27:41] **Datadir: /data/gbase**

[2020-12-13 12:27:41] Creating group [gbasedbt] and user [gbasedbt] with **HOME [/home/gbase]**.

[2020-12-13 12:27:41] Unziping [GBase8sV8.7\_3.0.0\_1\_93e040\_RHEL6\_x86\_64.tar].

[2020-12-13 12:27:47] Check path **INSTALL\_DIR(/opt/gbase)** security.

[2020-12-13 12:27:47] Execute software install, this will take a moment.

[2020-12-13 12:29:14] Building ~gbasedbt/.bash\_profile .

[2020-12-13 12:29:14] Building /opt/gbase/etc/sqlhosts .

[2020-12-13 12:29:14] Building /opt/gbase/etc/onconfig.gbase01 .

[2020-12-13 12:29:14] Creating DATADIR: /data/gbase .

[2020-12-13 12:29:14] Start run database init: oninit -ivy

Reading configuration file '/opt/gbase/etc/onconfig.gbase01'...succeeded

Creating /GBASEDBTTMP/.infxdirs...succeeded

Allocating and attaching to shared memory...succeeded

Creating resident pool 4310 kbytes...succeeded

Creating infos file "/opt/gbase/etc/.infos.gbase01"...succeeded

Linking conf file "/opt/gbase/etc/.conf.gbase01"...succeeded

Initializing rhead structure...rhlock\_t 16384 (512K)... rlock\_t (2656K)... Writing to infos file...succeeded

Initialization of Encryption...succeeded

Initializing ASF...succeeded

Initializing Dictionary Cache and SPL Routine Cache...succeeded

Bringing up ADM VP...succeeded

Creating VP classes...succeeded

Forking main\_loop thread...succeeded

Initializing DR structures...succeeded

Forking 1 'soctcp' listener threads...succeeded

Starting tracing...succeeded

Initializing 8 flushers...succeeded

Initializing log/checkpoint information...succeeded

Initializing dbspaces...succeeded

Opening primary chunks...succeeded

Validating chunks...succeeded

Creating database partition...succeeded

Initialize Async Log Flusher...succeeded

Starting B-tree Scanner...succeeded

Init ReadAhead Daemon...succeeded

Init DB Util Daemon...succeeded

Initializing DBSPACETEMP list...succeeded

Init Auto Tuning Daemon...succeeded

Checking database partition index...succeeded

Initializing dataskip structure...succeeded

Checking for temporary tables to drop...succeeded

Updating Global Row Counter...succeeded

Forking onmode\_mon thread...succeeded

Creating periodic thread...succeeded

Creating periodic thread...succeeded

Starting scheduling system...succeeded

Verbose output complete: mode = 5

OK

[2020-12-13 12:29:22] Creating system database.......

[2020-12-13 12:29:41] Creating dbspace plogdbs.

[2020-12-13 12:29:43] Creating dbspace llogdbs.

[2020-12-13 12:29:44] Creating dbspace tempdbs01

[2020-12-13 12:29:47] Creating smart blob space sbspace01

[2020-12-13 12:29:50] Creating dbspace datadbs01

[2020-12-13 12:29:53] Changing auto extend able on for chunk datadbs01

[2020-12-13 12:29:53] Creating default user for mapping user

[2020-12-13 12:29:53] Moving physical log to plogdbs.

[2020-12-13 12:29:57] Adding 10 logical log file in llogdbs.

[2020-12-13 12:30:01] Moving CURRENT logical log to new logical file.

[2020-12-13 12:30:13] Droping logical log file which in rootdbs.

[2020-12-13 12:30:14] Creating file $INSTALL\_DIR/etc/sysadmin/stop .

[2020-12-13 12:30:14] Optimizing database config.

[2020-12-13 12:30:14] Restart GBase 8s Database Server.

Reading configuration file '/opt/gbase/etc/onconfig.gbase01'...succeeded

Creating /GBASEDBTTMP/.infxdirs...succeeded

Allocating and attaching to shared memory...succeeded

Creating resident pool 34422 kbytes...succeeded

Creating infos file "/opt/gbase/etc/.infos.gbase01"...succeeded

Linking conf file "/opt/gbase/etc/.conf.gbase01"...succeeded

Initializing rhead structure...rhlock\_t 65536 (2048K)... rlock\_t (26562K)... Writing to infos file...succeeded

Initialization of Encryption...succeeded

Initializing ASF...succeeded

Initializing Dictionary Cache and SPL Routine Cache...succeeded

Bringing up ADM VP...succeeded

Creating VP classes...succeeded

Forking main\_loop thread...succeeded

Initializing DR structures...succeeded

Forking 1 'soctcp' listener threads...succeeded

Starting tracing...succeeded

Initializing 32 flushers...succeeded

Initializing SDS Server network connections...succeeded

Initializing log/checkpoint information...succeeded

Initializing dbspaces...succeeded

Opening primary chunks...succeeded

Validating chunks...succeeded

Initialize Async Log Flusher...succeeded

Starting B-tree Scanner...succeeded

Init ReadAhead Daemon...succeeded

Init DB Util Daemon...succeeded

Initializing DBSPACETEMP list...succeeded

Init Auto Tuning Daemon...succeeded

Checking database partition index...succeeded

Initializing dataskip structure...succeeded

Checking for temporary tables to drop...succeeded

Updating Global Row Counter...succeeded

Forking onmode\_mon thread...succeeded

Creating periodic thread...succeeded

Creating periodic thread...succeeded

Starting scheduling system...succeeded

Verbose output complete: mode = 5

[2020-12-13 12:30:34] Create database testdb.

[2020-12-13 12:30:35] Finish.

--== GBase 8s Information for this install ==--

$GBASEDBTSERVER : gbase01

$GBASEDBTDIR : /opt/gbase

USER HOME : /home/gbase

DBSPACE DIR : /data/gbase

IP ADDRESS : 0.0.0.0

PORT NUMBER : 9088

$DB\_LOCALE : zh\_CN.utf8

$CLIENT\_LOCALE : zh\_CN.utf8

JDBC URL : jdbc:gbasedbt-sqli://IPADDR:9088/testdb:GBASEDBTSERVER=gbase01;DB\_LOCALE=zh\_CN.utf8;CLIENT\_LOCALE=zh\_CN.utf8;IFX\_LOCK\_MODE\_WAIT=10

JDBC USERNAME : gbasedbt

JDBC PASSWORD : GBase123

创建的数据库状态如下：

[root@a02 ~]# su - gbasedbt

[gbasedbt@a02 ~]$ onstat -d

GBase Database Server Version 12.10.FC4G1AEE -- On-Line -- Up 00:06:14 -- 3366312 Kbytes

Dbspaces

address number flags fchunk nchunks pgsize flags owner name

4e3a0028 1 0x70001 1 1 2048 N BA gbasedbt rootdbs

60acfdc8 2 0x70001 2 1 2048 N BA gbasedbt plogdbs

610c7028 3 0x60001 3 1 2048 N BA gbasedbt llogdbs

610c7258 4 0x42001 4 1 2048 N TBA gbasedbt tempdbs01

610c7488 5 0x68001 5 1 2048 N SBA gbasedbt sbspace01

610c76b8 6 0x60001 6 1 2048 N BA gbasedbt datadbs01

6 active, 2047 maximum

Chunks

address chunk/dbs offset size free bpages flags pathname

4e3a0258 1 1 0 512000 501675 PO-B-D /data/gbase/rootchk

610c8028 2 2 0 512000 11947 PO-B-D /data/gbase/plogchk

610c9028 3 3 0 512000 11947 PO-B-D /data/gbase/llogchk

610ca028 4 4 0 512000 511947 PO-B-- /data/gbase/tempchk01

610cb028 5 5 0 512000 477465 477465 POSB-D /data/gbase/sbspace01

Metadata 34482 25659 34482

610cc028 6 6 0 512000 510041 PO-BED /data/gbase/datachk01

6 active, 32766 maximum

NOTE: The values in the "size" and "free" columns for DBspace chunks are

displayed in terms of "pgsize" of the DBspace to which they belong.

Expanded chunk capacity mode: always

[gbasedbt@bd ~]$ onstat -g seg

GBase Database Server Version 12.10.FC4G1AEE -- On-Line -- Up 00:06:58 -- 3366312 Kbytes

Segment Summary:

id key addr size ovhd class blkused blkfree

34 52564801 44000000 148320256 2171480 R 36211 0

35 52564802 4cd73000 1048576000 12289752 V 84869 171131

36 52564803 8b573000 2250207232 1 B 549367 0

Total: - - 3447103488 - - 670447 171131

(\* segment locked in memory)

No reserve memory is allocated

[gbasedbt@bd ~]$ onstat -g ntt

GBase Database Server Version 12.10.FC4G1AEE -- On-Line -- Up 00:07:24 -- 3366312 Kbytes

global network information:

#netscb connects read write q-free q-limits q-exceed alloc/max

2/ 3 1 13 13 1/ 1 240/ 10 0/ 0 1/ 1

Individual thread network information (times):

netscb thread name sid open read write address

4f1dcbe0 soctcplst 3 21:09:21 21:09:26 **0.0.0.0|9088|soctcp**

4f1debe0 soctcppoll 2 21:09:27

**脚本参数说明**

Usage:

AutoInit\_GBase8s.sh [-d path] [-i path] [-p path] [-s y|n] [-l locale] [-u user] [-o y|n]

-d path The path of dbspace.

-i path The path of install software.

-p path The path of home path.

-s y|n Value of dbspace is 1GB? Yes/No, default is Y.

-u user The user name for SYSDBA, gbasedbt/informix, default is gbasedbt

-l locale DB\_LOCALE/CLIENT\_LOCALE value.

-o y|n Only install software? Yes/No, default is N.

-d 指定数据库空间目录，默认为/data/gbase（若该目录非空，则使用INSTALL\_DIR/data）

-i 指定数据库软件安装目录INSTALL\_DIR，默认为/opt/gbase

-p 指定数据库用户gbasedbt的HOME目录，默认为/home/gbase

-s 数据库空间是否均使用1GB，默认是y（所有数据库空间均使用1GB大小）

-u 指定数据库系统管理员的名称，仅限gbasedbt和informix

-l 指定数据库的DB\_LOCALE/CLIENT\_LOCALE参数值，默认为zh\_CN.utf8

-o 指定仅安装数据库，而不进行初始化操作，默认是n（安装并初始化数据库）