

数据100%可用性保证书

CHANGHONG Virtual Storage Platform G590E/G790E/G1090E

CHANGHONG保证, CHANGHONG Virtual Storage Platform G590E/ G790E / G1090E (“设备”)将为用户提供自安装之日起为期36个月(“保证期”)100%的数据可用性。

如在该保证期内发生一次“设备故障”,CHANGHONG将向用户提供一个相当于一个类似配置的阵列组的购买价格的30%的价格抵免。如在该保证期内发生多于一的设备故障,用户有权就每次设备故障获得一个30%的价格抵免;但是,由这些设备故障引起的所有价格抵免额的总和不超过一个类似配置阵列组的购买价格的100%。对于发生在动态资源供应(Dynamic Provisioning)、动态分层(Dynamic Tiering)或CHANGHONG存储快照软件(Thin Image pool)的故障的抵免将基于发生故障的单个阵列组而非构成池的所有阵列组。阵列组也称为奇偶校验群组,是存储容量的基本单元,它由组成RAID的驱动器组成,被视为设备的一个群组。一个阵列组由四块、八块或十六块驱动器组成,其包含了用户的数据和奇偶校验数据信息。

基于本保证书的目的,“设备故障”指由于设备的故障而造成的数据可用性的丧失,导致在单个逻辑磁区内不能读取或写入数据,但不包括在通道冗余不存在的情况下由千通道故障引起的数据不可用。如果故障发生在保证期以外,或由以下原因之一造成,则不属于本保证书中所指的“设备故障”:

(1)运行环境,(2)任何外置的设备或部件,(3)用户对硬件、固件、操作系统或应用软件的任何修改,或用户超出CHANGHONG授权范围而对配置设置的任何变更(如标准系统功能),或(4)如果Hi-Track或其他监测机制监测到必须通过预设的部件更换或者CHANGHONG建议的配置变更或维修方能解决的问题,而用户选择延迟或放弃此种维修或重新配置。

CHANGHONG和用户可以在本保证期内经协商达成一致后,CHANGHONG将向用户提供新的或经过改进的技术,且此项技术可能要求对设备的内部建构进行修改。此种修改可能要求系统停顿或重启以便实施维护或升级。在此情况下,在修改的过程中,用户可能会经历数据可用性的中断或设备停机。无论如何,此种停机不视为本保证书所界定的设备故障,因而此种停机、中断或数据可用性的下降不享受价格的抵免。

为了获得此种抵免,用户必须为任何设备故障作出令人满意的文件记录。这些抵免可用于将来向CHANGHONG购买设备或服务。

CHANGHONG在本保证书中的义务，以及用户获得抵免的权利，必须以满足以下条件为前提：

1. 用户必须已经安装并且正在运行Hi-Track 。
2. 保证期内，在用户和CHANGHONG或CHANGHONG授权的服务供应商之间应当订有一份有效的CHANGHONG服务协议或关于设备维护的类似协议。
3. 在CHANGHONG准备履行其在本保证书中的义务之时，用户不得存在任何未履行或违反用户与CHANGHONG（或CHANGHONG的代理商／分销商）之间适用于设备或与设备有关的任何协议的行为。
4. 硬盘驱动器在阵列组中应采用双重奇偶校验配置。

如未能履行本数据可用性保证书，CHANGHONG向用户承担的唯一责任和用户向CHANGHONG所有能要求的唯一的和排他的救济方式仅限于本保证书中规定的救济方式。

注意：Hi-Track为CHANGHONG IT Information Products Co.,Ltd. 所有的商标。



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100% DATA AVAILABILITY WARRANTY EXHIBIT

CHANGHONG Virtual Storage Platform G590E/ G790E /
G1090E

CHANGHONG IT Information Products Co.,Ltd. (CHANGHONG IT) warrants that the CHANGHONG Virtual Storage Platform G590E/ G790E / G1090E ("Equipment") will provide the Customer with 100% data availability for a period of twenty- four (36) months following the date of installation (the "Warranty Period").

If a Failure occurs during this Warranty Period, ChangHong will grant the Customer a credit equal to 30% of the purchase price of a similarly configured array group. If more than one Failure occurs during the Warranty Period, the Customer will be entitled to a 30% credit for each such Failure; however, the aggregate of all credits for all such Failures shall not exceed 100% of the purchase price of a similarly configured array group. Credit for a failure that occurs within a Dynamic Provisioning, Dynamic Tiering or Thin Image pool will be based on the individual array group that failed not of all of the array groups that make up the pool. An array group (also called parity group) is the basic unit of storage capacity; it is formed by drives configured with RAID architecture that are treated as one group for the Equipment. An array group consists of either four, eight or sixteen drives containing both users' data and parity data information.

For the purposes of this Warranty, a "Failure" means a loss of availability of data caused by a malfunction of the Equipment making it unable to read or write data at the individual logical volume level. It does not include unavailability of data caused by channel path failure where channel path redundancy is absent. A



malfunction will not be classified as a "Failure" if it occurs outside of the Warranty Period or is caused by any one or more of the following:

- i. The operating environment;
- ii. Any externally attached devices or components;
- iii. Any Customer modification to hardware, firmware, operating or application software, or changes to configuration settings outside of CHANGHONG's authorized procedures (i.e. standard system functionality); or
- iv. If Hi-Track or other monitoring mechanisms detected a problem that required a scheduled component replacement or CHANGHONG recommended a configuration alteration or implementation of a repair and the Customer elected to defer or otherwise forego such repair or reconfiguration.

During this Warranty Period, CHANGHONG and the Customer may agree that CHANGHONG will provide Customer with new or improved technology that may require modification to the Equipment's internal architecture. Such modifications may require that the system be quiesced or power cycled in order to perform maintenance or upgrade activity. During such modification, the Customer may experience some data availability interruptions or Equipment downtime. However, such downtime is not deemed to be a Failure covered under this Warranty, and no credit will be allowed for any such downtime, outage or data availability degradation.

The Customer must satisfactorily document any Failure in order to qualify for this credit. The credit may be used



toward the purchase of future CHANGHONG equipment or services from CHANGHONG.

CHANGHONG's obligations hereunder, and Customer's entitlement to the credit, are contingent upon the following:

1. The Customer must have Hi-Track installed and operating.
2. A CHANGHONG Services Agreement or similar agreement governing the maintenance of the Equipment must be in effect between Customer and CHANGHONG or CHANGHONG's authorized service provider throughout the Warranty Period.
3. At the time when CHANGHONG is to perform its obligations under this Warranty, Customer shall not be in default or breach of any agreement between Customer and CHANGHONG governing or relating to the Equipment.
4. Hard disk drives must be configured in an array group utilizing double parity.

CHANGHONG's sole liability to Customer and Customer's sole and exclusive remedy against CHANGHONG, for nonconformance with this Data Availability Warranty is the remedy stated in this Warranty.

Note: Hi-Track is a trademark of CHANGHONG IT Information Products Co., Ltd.