The Main Causes of Failures SQL Server

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Abstract - **Analysis of problems and failures of SQL Server by using statistical processing of errors of different users.**

Keywords – **SQL server, problem administration,   SQL Mail.**

I. INTRODUCTION

SQL Server is a relational database server, developed by Microsoft : It is a software product whose primary function is to store and retrieve data as requested by other software applications, be it those on the same computer or those running on another computer across a network (including the Internet). There are at least a dozen different editions of Microsoft SQL Server aimed at different audiences and for different workloads (ranging from small applications that store and retrieve data on the same computer, to millions of users and computers that access huge amounts of data from the   Internet   at   the   same   time).

II. INSTRUCTION FOR AUTHORS

Topical issue is scheduled and the reasons for irregular bounce SQL Server. Therefore, a study was conducted type of errors that occur in people. Summarized the results obtained results are presented in order of priority to address, not in order of severity of consequences:

Application packs and other fixes. Not surprisingly, the most common cause of delays was the application of service packs and other fixes patches (in this category includes bug fixes and service packs for operating systems and databases). Given the large number of important programs correct flaws in security, issued recently, Microsoft should improve the mechanism of fixes that allow consumers to apply service packs and fixes without rebooting servers.

Problem SQL Mail. From a technical point of view, most problems with SQL Mail related to the Messaging API (MAPI), and not to code SQL Mail, but SQL Mail remains the cause of many failures encountered by users. *Uunknown origin.* It is believed that this problem causing memory loss. All these problems blamed Microsoft, but from experience we can say that they are caused by programs created by customers and software producers created a differently.

Errors in the administration and maintenance procedures. Typically, the failure caused by a mistake someone from staff or network problems. The main source of problems - the techniques that something adjust or testing, no one reporting it, so the server crashes. Violation of clear procedures for correcting errors.

Lack of knowledge and training. This reason is closely connected with errors in administration. The difference is that in the previous case database administrators know what to do, but do not do this, or perform the procedure incorrectly. But sometimes the database administrators make mistakes that can not find the right solution. You can not build a database with high reliability without the cost of training, designed policies and procedures that take into account the human factor.

Also, there are: *adding indexes to very large tables, which led to the blocking, virus attacks, complex interdependence of the information environment.*

Over the past few years, Microsoft has greatly facilitated the deployment of SQL Server customers to create systems of high reliability, but it is clear that both Microsoft, and SQL Server community has yet to work in this direction.

III. CONCLUSION

The most frequent reason that makes restart servers, SQL Server - Servers dependence of complex heterogeneous environment in which they operate. They are listed along with the DNS-servers, domain controllers, backup servers, firewalls, routers, switches, repeaters, thousands of network cables, power supplies, redundant power supplies, disks, united in a SAN, many kilometers fiber optic channels that provide communication call to reserve a site, and other database servers. All these components require maintenance, updating, rebooting, etc. The problem is that the failure of one of these components affect the operation of other components, and eventually, Windows or SQL Server hangs and requires reboot.

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