Query to Find Free Space on All Databases

Occasionally you need to take inventory of how much free space each database has.

You can find this quickly and easily in Database Health Monitor, but if you want to get it programmatically you can do it with the following query.

```
DECLARE @databaseList as CURSOR; DECLARE @databaseName as NVARCHAR(500);
DECLARE @tsql AS NVARCHAR(200);   CREATE TABLE ##FreeSpace (  [DbName] va
rchar(1000),  [FreeSpaceInMb] DECIMAL(12,2),  [Name] varchar(1000),  [Fil
ename] varchar(1000) );  SET @databaseList = CURSOR  LOCAL FORWARD_ONLY S
TATIC READ_ONLY  FOR         SELECT QUOTENAME([name])        FROM master.
dbo.sysdatabases -- FOR SQL Server 2000 if you are doing archeological sq
l work. there is no sys.databases        WHERE DATABASEPROPERTYEX([name],
 'Status') = 'ONLINE' -- version will be zero if the database is offline.
     and [name]  'tempdb'         OPEN @databaseList; FETCH NEXT FROM @da
tabaseList into @databaseName; WHILE @@FETCH_STATUS = 0 BEGIN  SET @tsql
= N'  USE ' + @databaseName + ';  INSERT INTO ##FreeSpace SELECT ''' + @d
atabaseName + ''' as DbName,   CAST(CONVERT(DECIMAL(12,2),             Ro
und((t1.size-Fileproperty(t1.name,''SpaceUsed''))/128.000,2)) AS VARCHAR(
10)) AS [FreeSpaceMB],        CAST(t1.name AS VARCHAR(500)) AS [Name],
   Filename FROM ' + @databaseName + '.dbo.sysfiles t1;';     EXECUTE (@t
sql);      FETCH NEXT FROM @databaseList into @databaseName; END CLOSE @d
atabaseList; DEALLOCATE @databaseList;   SELECT * FROM ##FreeSpace ORDER
BY FreeSpaceInMb desc; DROP TABLE ##FreeSpace;
```

This query has been tested on SQL Server 2000, 2005, 2008, 2008R2, 2012, 2014, 2016, 2017, and 2019. This references master.dbo.sysdatabases instead of sys.databases since sys.databases didn't exist on SQL Server 2000, and I had to make this work on 2000 for one client. Works great on SQL Server 2019, which is where I have used this the most lately.

I hope you find this useful.

-Steve