kutils\_190716. Previous kutils\_ 190708

О версии   
in context of developing of ksodd\_pgf\_with\_ksess\_190715 and ksess\_1190715\_developing  
([1](#list_of_changes_190716))The KSODD sends email messages by its own function. As if more correct to have a common function for it. But a propel cause is a want to get acquaintence with gopkg.in/gomail.v2

It was over (closed) 190801

Proposals to next version

Abstract

This packet includes utility functions of common destination. But it is need have in mind, that this packet changes behavior of the system packet “rand” by that that it have init function, which sets new value for the seed (see [https://golang.org/pkg/math/rand/#Seed](https://golang.org/pkg/math/rand/" \l "Seed) and [True random funtions](#true_rand_funcs))

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API

NULL functions

NULL functions are functions with prefix “Null”. Each of function with prefix "Null" presumes that its first parameter carries a corresponding to its name value and returns its string representation. E.g. the function “NullTimeToString” presumes that the first parameter is of type “time”. If a first parameter is nil the second one (i.e. "ifNil") is returned. If the first is not nil and the presumption is not true, then the third (i.e. "ifWhatIs") is returned. There are the next functions:

func NullTimeToString(nt interface{}, ifNil string, ifWhatIs string) string

func NullIntToString(nt interface{}, ifNil string, ifWhatIs string) string

The next function presumes float64

func NullFloatToString(nt interface{}, ifNil string, ifWhatIs string) string

True Random functions

These functions return a random value from the seed of duration from 07.11.1917 to now (see also common notes). In strict formal sense these functions can return not nil error if the function init fails. In that case these anyway return a random value but from the default seed. There are the functions

func TrueRandInt() (string, error)

func TrueRandIntAsInt() (int, error)

Fmt wraps  
They are wraps of the fmt printing functions to stdOut. Than is they calls a corresponding fmt function if the flag FmtFlag is not 0. They intend for purposes of debugging that is you may menage printing console debug information by setting the flag.  
In this version released (kutils.)func Printf(f string, args ...interface{}). When printing to parameter f prefix “--M--”will be added

Beside those mentioning upward there is also

func StrWithoutNull(str string, rep string) (res string). This function returns string that is produced from parameter “str” by replacing all bytes that are less than 9 with parameter “rep”. If rep==”” or its length>1 then it sets rep=”!”

func EraseNulls(str string) (res string)  
It removes null characters (and only them) from a string. Null characters are those when str[i]==0

Получить трассировку стека  
Трассировка дается как последовательность имен функций, разделенных знаком -. В вершине (первый член последовательности) имя функции, вызывающая эту

func TraceStack() (stack string)

Представить interface{} как  
Эта группа функций преобразует значение типа inteface{} в значение другого типа если это возможно. Они имеют префикс IntfTo и схожи с <#null_funcs>, но если последнии всегда возвращяют string, то эти специфическое значение (int, string ...), и (true, false) как признак, удалась ли операция преобразования. Имеются в группе  
IntfToInt(v interface{}) (int, bool) – возвращает true, если параметр содержит uint, int, int32, int64  
func IntfToString(v interface{}) (string, bool)– возвращает true, если параметр содержит string. Иначе если параметр nill, то "no string but nil", иначе "no string"

func GetWantedLines(r io.Reader, filter string) (lns []string, err error)

отбирает из потока строки, которые содержат подстроку filter  
190708 Is it really so that golang does not have such function? I suspect that in time I come across it. 190716 Does it select wanted lines from a very stream? In other word, may the parameter r be named “stream”? Do not a next explanation be more correct?  
Отбирает из r сроки до исчерпания r или ошибки. Если ошибки нет, Lns содержит отобранные строки, иначе Lns==nil. Время работы не лимитируется!

Лист изменений

190124\_2 See <#api_FmtWraps>

190202\_1 See <#api_EraseNulls>

190403\_1 See <#api_TraceStack>  
 190403\_2 See <#api_IntfTo>

190708\_1 See <#api_GetWantedLines>

190716 Nothing was done