

System Configuration:

CPU: 2.2Ghz Intel Core i7

RAM: 16GB DDR4

Statistics:

Name	Num Characters	Total Nodes	Exact Matching Length	Construction Time (Seconds)
S1			3	-
s2			4	-
Human-BRCA2-cds	11382	18683	14	0.003846
colorblind_human_gene.fasta	3302	5408	18	0.001097
colorblind_mouse_gene.fasta	3843	6315	14	0.001486
Slyco.fas	155461	254435	48	0.064632
chr12	1078175	1777696	8375	0.673716

From the above table its clear that the construction time is linear in time roughly i.e.

Construction Time $O(n)$

Each node takes 48 bytes. Int is 4 bytes and pointers are 8 bytes

```
typedef struct _st_node_t {
    int node_idx; // Unique id for each node
    int leaf_idx; // Unique id for each suffix. All leaf less node had index -1
    struct _st_node_t *p_suffix;
    struct _st_node_t *p_child;
    int edge_label[2]; // start and end offset of the edge
    int string_depth; // Offset to the string from the root
    struct _st_node_t *p_sibling;
}st_node_t;
```